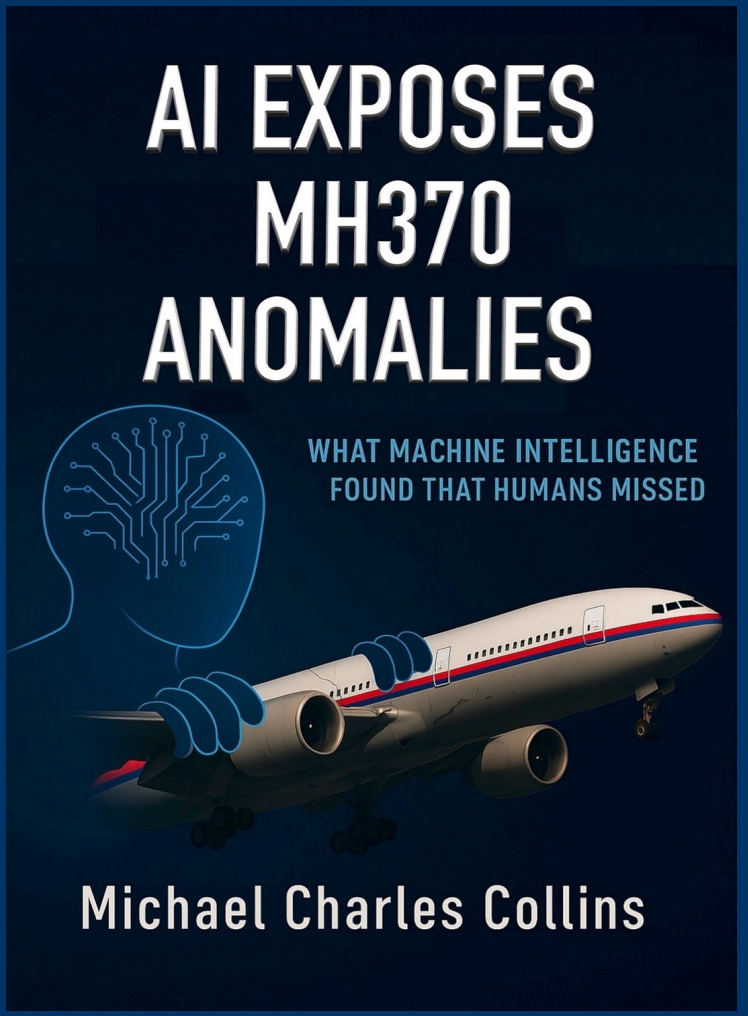
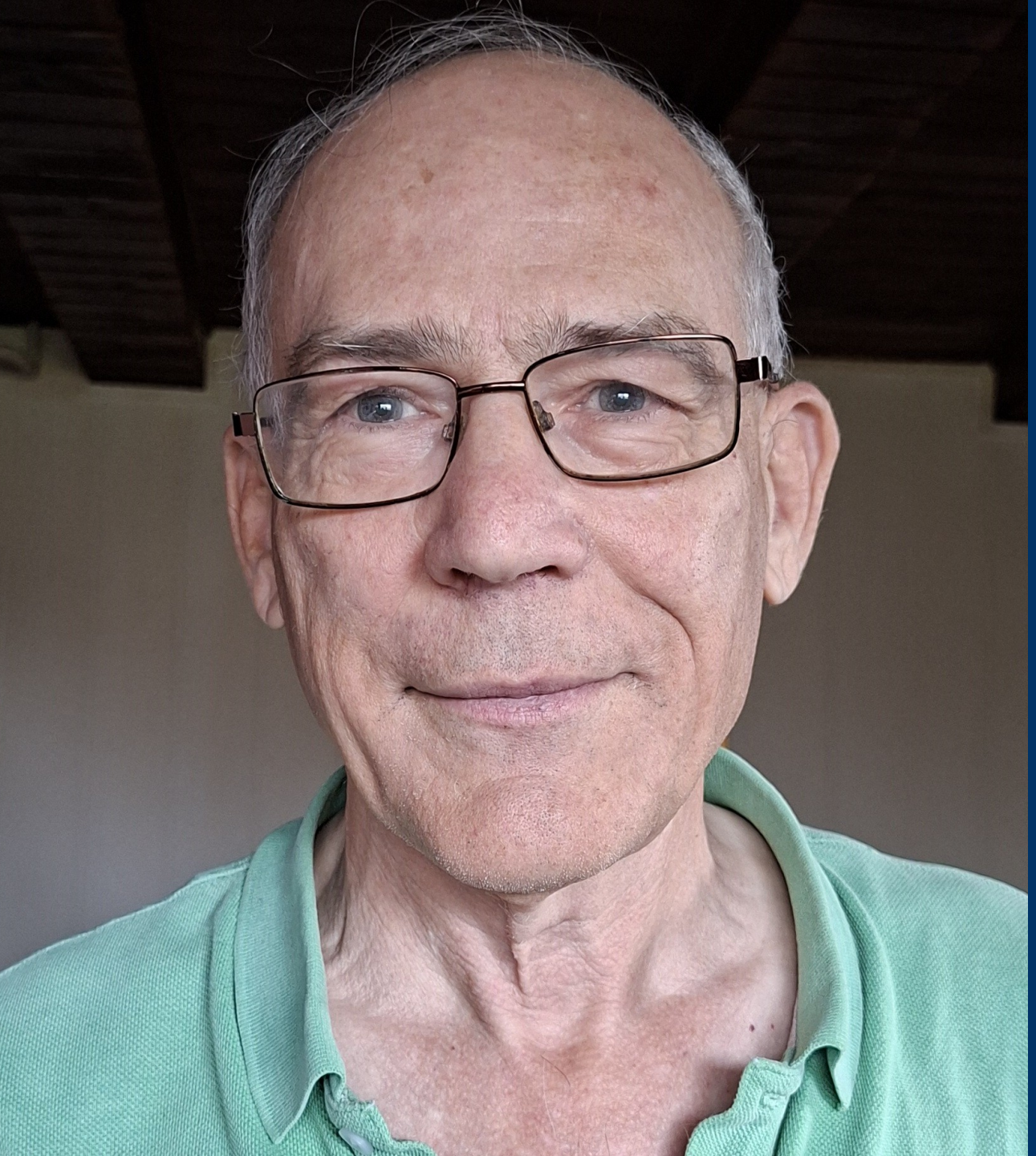
AI REVEALS MH370 IRREGULARITIES

Discoveries by Machine Intelligence Overlooked by Human Analysis

A Technical Examination of Flight Path Variations and System Irregularities



Guest: Michael Charles Collins
Author of 'AI Exposes MH370 Anomalies'
Host: Sid Sit Down With Sid Podcast
Date: May 2026



AUTHOR

Michael Charles Collins

- Background in IT and Aviation
- Commercial Pilot (Australia)
- Researching MH370 for several years

OBJECTIVE & SCOPE

Core Objective: Identify measurable anomalies in MH370 data relative to standard Boeing 777-200ER operations.

Data-First Approach:

Analysis based on original datasets:

- Inmarsat Satellite Logs
- ADS-B Transmissions
- ATC Communications
- Radar Data
- etc

No-Speculation Principle

Focus: WHAT + HOW (data)
Exclude: WHO + WHY (speculation)

Validation

AI findings cross-checked against:

- Aircraft performance limits
- Independent aviation sources

Focus on Verifiable Data

(Example ADS-B positional reco

Extract from the Malaysian ADS-B log

3582	62433.1	226407	MAS370 _	0	0	2157	350	75008F	6.929675	103.5904
3583	62433.61	226418	MAS370 _	314.9968	LIKELY INVALID NIL ALTITUDES		350	75008F	6.930275	103.591
3584	62434.15	226428	MAS370 _	0			0	75008F	6.931273	103.5919
3585	62434.55	226437	MAS370 _	318.9723			0	75008F	6.931917	103.5925

AIRCRAFT PROFILE: 9M-MRO

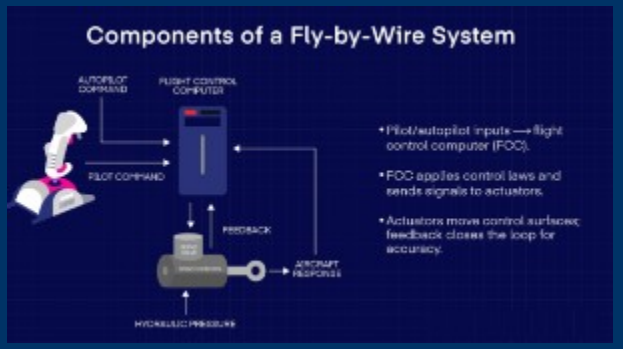
Aircraft Systems Overview

Type: Boeing 777-200ER (Extended Range).

Engines: Two Rolls-Royce Trent 811-17 turbofans.

Key Systems:

- **Fly-By-Wire (FBW):** Pilot inputs are electronically routed to flight control computers.
- **Triple Redundancy:** Multiple independent systems to ensure "no single point of failure".


Components of a Fly-by-Wire System
AUTOPILOT COMMAND
FLIGHT CONTROL COMPUTER
PILOT COMMAND
FEEDBACK
AIRCRAFT RESPONSE
• Pilot/autopilot inputs → flight control computer (FCC).
• FCC applies control laws and sends signals to actuators.
• Actuators move control surfaces; feedback closes the loop for accuracy.

Communication Systems:

- **ACARS:** Digital data transmission system (VHF/Satellite)
- **SDU (Satellite Data Unit):** Maintains connection with the Inmarsat Satellite network.

Navigation: Laser Gyro Inertial Navigation System (INS) and GPS provide precise aircraft positioning.

THE COMMUNICATION HIERARCHY

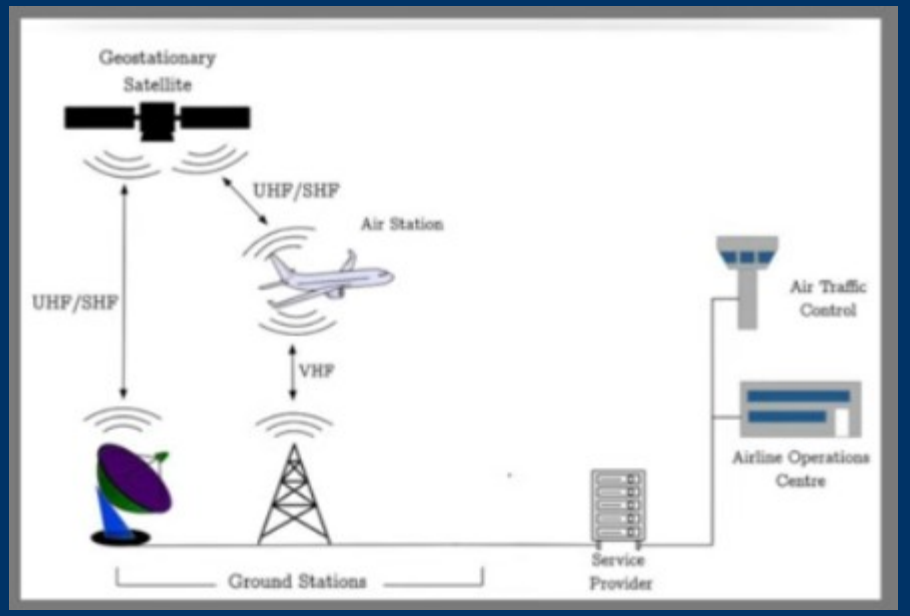
Understanding the "Digital Handshake“

VHF Radio (Line-of-Sight): Pilot ↔ ATC communication (~250 miles at cruising altitude).

ADS-B (The Digital Beacon): Broadcasts position, speed, altitude (~2x per second)

ACARS (The Text Messenger): Sends aircraft data (e.g. engine health, position reports)

The SDU (Satellite Data Unit): Maintains satellite link → creates “Handshake” / “Ping”



EACH LAYER PROVIDES A DIFFERENT WAY TO TRACK THE AIRCRAFT

WHEN ONE LAYER DISAPPEARS, OTHERS MAY STILL PROVIDE CLUES

NORMAL OPERATIONS (00:41 – 01:07)

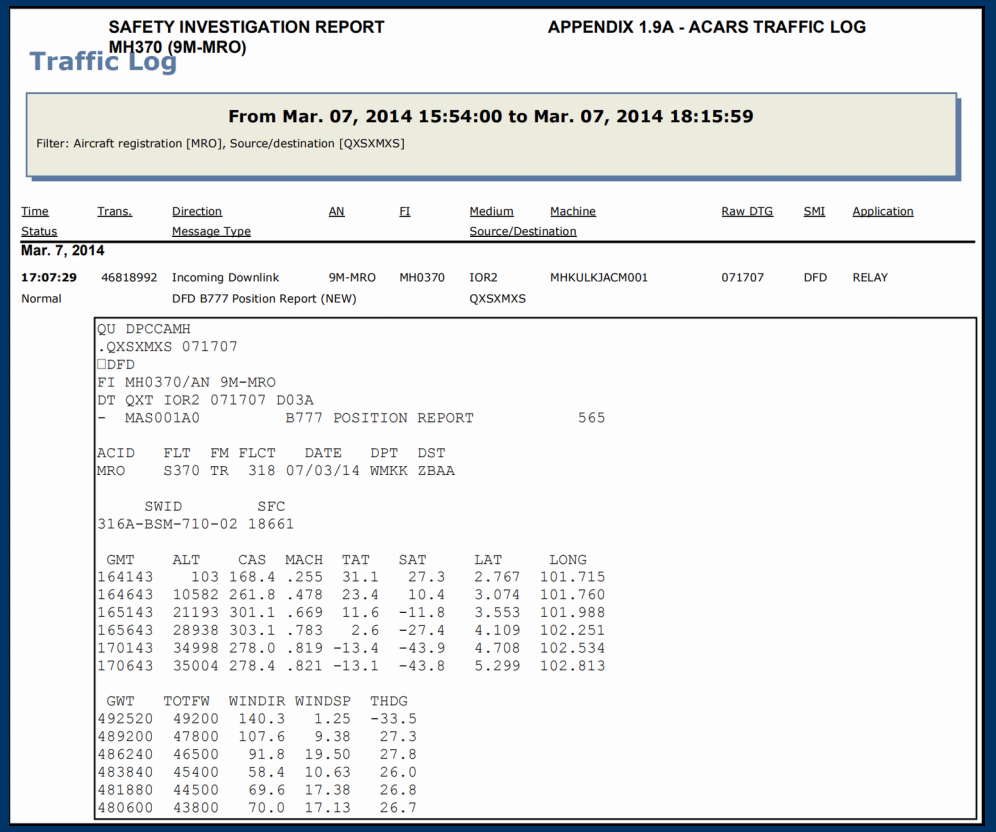
The official report stated:

12:41 AM – Take-off: Departs Kuala Lumpur → Beijing.

Standard Procedures: Follows SID → climbs to FL350 (35,000 ft).

01:01 AM - Leveling Off: Levels off → tracking toward IGARI waypoint.

01:07 AM - Final ACARS Message: All systems normal.



SAFETY INVESTIGATION REPORT
MH370 (9M-MRO)

APPENDIX 1.9A - ACARS TRAFFIC LOG

Traffic Log

From Mar. 07, 2014 15:54:00 to Mar. 07, 2014 18:15:59

Filter: Aircraft registration [MRO], Source/destination [QXSXMXS]

Time / Status	Trans.	Direction / Message Type	AN	FI	Medium / Source/Destination	Machine	Raw DTG	SMI	Application
Mar. 7, 2014									
17:07:29 Normal	46818992	Incoming Downlink DFD B777 Position Report (NEW)	9M-MRO	MH0370	IOR2 QXSXMXS	MHKULKJACM001	071707	DFD	RELAY

```
QU DPCCAMH
.QXSXMXS 071707
□DFD
FI MH0370/AN 9M-MRO
DT QXT IOR2 071707 D03A
-  MAS001A0          B777 POSITION REPORT           565

ACID   FLT  FM FLCT   DATE   DPT  DST
MRO    S370 TR  318 07/03/14 WMKK ZBAA

     SWID         SFC
316A-BSM-710-02 18661

 GMT    ALT    CAS  MACH  TAT   SAT     LAT     LONG
164143    103 168.4 .255  31.1   27.3   2.767  101.715
164643  10582 261.8 .478  23.4   10.4   3.074  101.760
165143  21193 301.1 .669  11.6  -11.8   3.553  101.988
165643  28938 303.1 .783   2.6  -27.4   4.109  102.251
170143  34998 278.0 .819 -13.4  -43.9   4.708  102.534
170643  35004 278.4 .821 -13.1  -43.8   5.299  102.813

 GWT   TOTFW  WINDIR WINDSP  THDG
492520  49200  140.3   1.25  -33.5
489200  47800  107.6   9.38   27.3
486240  46500   91.8  19.50   27.8
483840  45400   58.4  10.63   26.0
481880  44500   69.6  17.38   26.8
480600  43800   70.0  17.13   26.7
```

THE IGARI HANDOVER

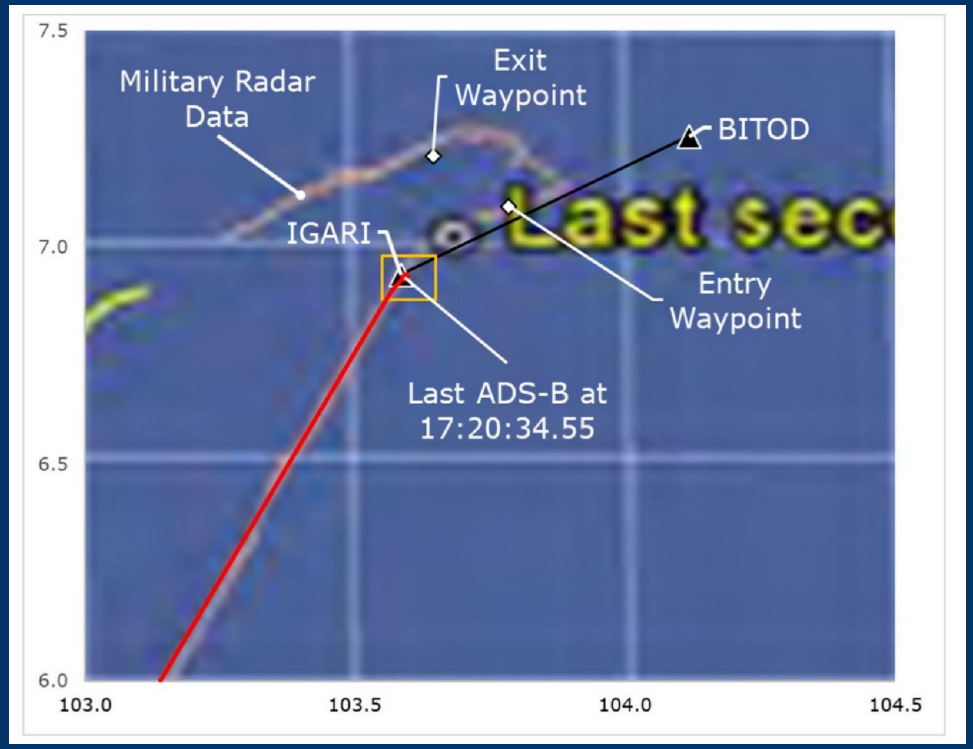
Precision Disappearance

01:19:30 AM: Final Call

01:20:36 AM: Transponder off

01:22:00 AM: Aircraft makes a sharp left turn heading for Penang

01:23:00 AM: Missed ATC Check-in

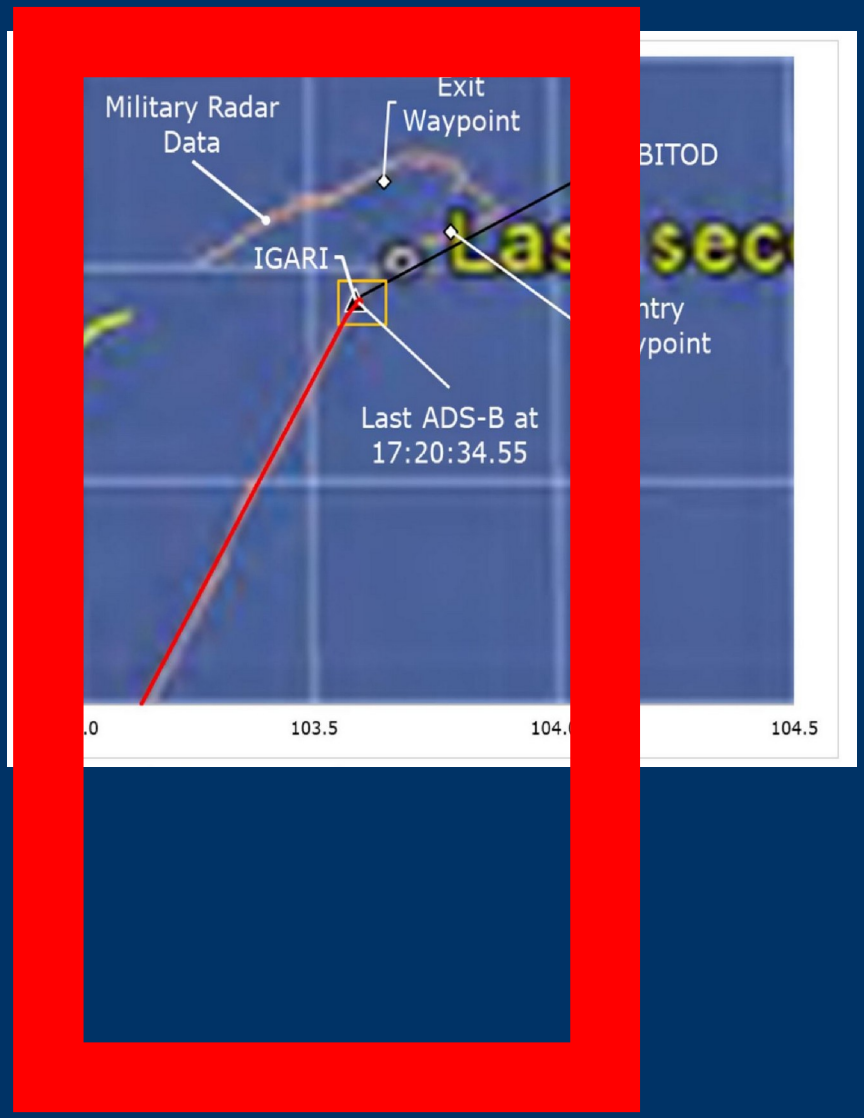


AI Analysis: Does the Timeline Fully Align?

AI Observation: The reported 1:21 AM transponder loss and subsequent sharp left-hand turn show potential inconsistencies with the available data.

Key Question: Do the data points fully support this sequence of events?

Next Step: Identify and examine specific discrepancies flagged by AI.



DISCREPANCIES.

	A	B	C	D
1			LIST OF THE MAJOR ANOMALIES DETECTED WITH A PERCENTAGE PROBABILITY THAT BECAUSE OF THAT MH370 ACTUALLY MADE IT TO IGARI	
2	AREA	ID	DESCRIPTION	PERCENTAGE PROBABILITY MH370 MADE IT TO IGARI
3	ATC AUDIO	A1	"All right good night" changes to "Good Night Malaysian 370".	10
4	"	A2	Two unsolicited 35000 ft level calls made within 6 minutes.	50
5		A3	Last transmissions were overpeaked i.e. Distorted.	70
6		A4	Initially it was stated the First Officer was the last to make a radio call. Then later it was changed to the captain.	90
7		A5	At an early press conference the Malaysian Acting transport misinister stated the last transmission from the aircraft was at 1:07 AM. This is nowhere near IGARI. Latter this was changed to 1:19 AM	80
8		A6	Last radio call was non standard. It omitted the frequency (120.9)	90
9	GENERAL ATC	B1	Flight Progress slip not filled in at hand over position near IGARI.	50
10		B2	19 minutes delay for Vietnam to contact Malaysia reference failed handover.	50
11	CIVIL RADAR	C1	Distances not correct on Civil Radar Plots Diagram.	60
12		C2	First change of direction should be shown as very slight curve. It was drawn as a line.	60
13		C3	Only part of Civil Radar data released up to Latitude 5.2. Should be no reason not too release all up to IGARI.	60
14		C4	No Civil Radar data from Thailand, Vietnam and Singapore. No ATC Audio/Transcript from Vietnam. They were the last in charge of MH370.	80
15	FLIGHT SIMULATOR DATA	D1	Large parts of flight files were redacted.	40
16		D2	Due to the fact Windows Shadow Copy could not back up the temporary flight files then data likely was created after the aircraft went	1
17	SATELLITE LOG - ACARS	E1	ACARS data shows aircraft flying faster than ADS-B data	40
18		E2	The number of retries of the 'Contact Ho Chi Ming' messages does not match with the ACARS report.	80
19		E3	550 Metres drift occuring when just taxying for 1.6 kilometres. Possible but not very likely.	40
20		E4	Excessive unexplained time of 88 seconds for aircraft to reply to the ground station during the 18:25 Login (average is less than 4 seconds).	90
21		E5	46 Minutes from the start of the SU log have been redacted.	95
22		E6	Multiple post flight changes to the ACARS report	90
23		E7	Redaction of message sent to MH370 via the VHF channel	90
24		E8	Redacted satellite log had four invalid times (.000 millesecs). This was corrected in the final log. Probably caused just by a typo error.	99
25	SATELLITE LOG - PINGS	F1	Post created flight simulator route is similar to satellite derived route. This adds weight that the satellite data might have been modified.	90
26	FLIGHT TRACKING SITES	G1	Flightradar24 changes to times i.e. 1:50 AM to 1:21 AM.	40
27		G2	Flightaware manually added an additional entry in the log with a position near IGARI with the same invalid time as FlightRadar24. Namely	40
28		G3	At least one other than FlightRadar24 appeared to have ADS-B coverage all the way to IGARI on 8/3/2014. However only one flight tracking site managed to track MH370 to IGARI (Latitude North 6.9). The remainder only got as far as Latitude North 4.7.	40
29		G4	For no apparent reason the government had banned live aircraft tracking on the MH370 route except for just one of the Flight Tracking	50
30		G5	FlightRadar24 had an extra 28 seconds of ADS-B data compared to the Malaysian ADS-B log.	10
31		G6	FlighRadar24 extracted last two entries for MH370 with an altitude of 35,000FT. But on play back these entries showed a nil altitude.	5
32		G7	FlightRadar24 data was rounded to five decimal places. However six out of 62 entries towards the end of the file were rounded to two and one with one decimal places. A program should use the same rounding rules for all transactions.	20
33		G8	Early FlightRadar24 playbacks were missing aircraft.	95
34		G9	Next days flight Kuala Lumpur deviated at same place as MH370 near IGARI and then climbed an impossible altitude of 49,800 ft.	90
35		G10	FlightAware after MH370 suddenly stopped showing closest airport for ADS-B receivers. Also amended historical data.	95
36	MILITARY RADAR	H1	No data was released just a radar trace diagram	90
37		H2	Thailand showed an aircraft doing a 180 heading towards Kuala Lumpur. Then turning right to Butterworth. Different track to official report.	70
38	ADS-B DATA	I1	ADS-B should match with FlightRadar24 data. There are 28 seconds of missing transactions and last altitudes do not match.	30
39		I2	Raw Asterix file should cover MH370 flight. However is around 10 hours different.	90
40		I3	Ascii extract of MH370 Astrix file data shows could not have been transmitted by an aircraft. Likely partly created post-flight.	50
41		I4	Terrigal and Genting ADS-B files released after 11 years data shows could not have been received directly from aircraft	70
42	OTHER	J1	Malaysia said they did not launch fighter aircraft. However reports indicate F18's searched to the North West of Butterworth.	95
43	ARINC/SITA LOGS	K1	There are no SITA or ARINC raw logs supplied or mentioned in the official report	95
44	PRIOR FLIGHT MH371	L1	The last ACARS 5 minute position report segment is too long. This means on approach aircraft is flying to fast.	95
45		L2	Strange that when MH371 was 9.5 NM from touch down it is heading 4.9 degrees away from the extended centre line.	95
46		L3	It appears one of the maintenance forms in the area where the landing time is recorded appears to be modified.	95
47		L4	Reference L1-L3 it is possible the recorded landing time of 07:28 may have been in reality a couple of minutes later.	95
48	RATIO IS FOR ALL DATA SETS IS 1 IN:		Probability aircraft making it to IGARI taking into account all discrepancies	2,840,015,539,250
49				
	RATIO FOR DATA RELATED TO MH370 TURNING AT IGARI IS 1 IN:		Probability aircraft making it to IGARI with directly related discrepancies. THIS EXCLUDES D1,D2,E2,E4,E7,F1,G9,J1,K1,L1,L2,L3,L4	433,927,884,136

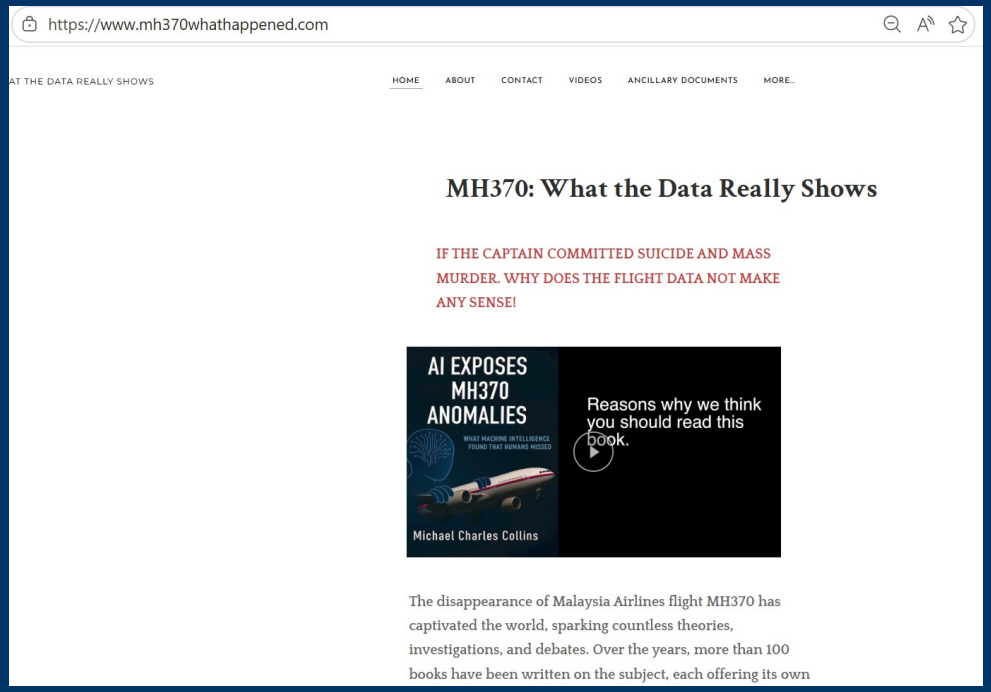
AI has identified a total of 45 potential discrepancies...

Across independent aviation data systems

Scope & Additional Resources

Todays Focus: A selected subset of key discrepancies (due to time constraints)

Full Analysis Available: All 45 discrepancies summaries available.. www.MH370WhatHappened.com.


https://www.mh370whathappened.com
AT THE DATA REALLY SHOWS
HOME
ABOUT
CONTACT
VIDEOS
ANCILLARY DOCUMENTS
MORE...
MH370: What the Data Really Shows
IF THE CAPTAIN COMMITTED SUICIDE AND MASS MURDER. WHY DOES THE FLIGHT DATA NOT MAKE ANY SENSE!
AI EXPOSES MH370 ANOMALIES
WHAT MACHINE INTELLIGENCE FOUND THAT HUMANS MISSED
Michael Charles Collins
Reasons why we think you should read this book.
The disappearance of Malaysia Airlines flight MH370 has captivated the world, sparking countless theories, investigations, and debates. Over the years, more than 100 books have been written on the subject, each offering its own

Additional Material:

- Free Explanatory papers
- In-Depth video analysis

Discrepancies – ATC Audio

ID A6 – Non-standard Final Radio Call

The final transmission omitted the frequency (120.9), which is atypical. Given that Captain Zaharie was a highly experienced training captain—and that all prior readbacks on this flight included the frequency—this omission is unexpected.

12:46 TRANSMISSION FREQUENCY INCLUDED

LUMPUR APPROACH

TIME	WHO IS TALKING	WHAT WAS SAID
12:46:36	ATC	Malaysian Three Seven Zero contact Lumpur Radar One Three Two Six good night
12:46:40	CAPTAIN (MH370)	Night One Three Two Six Malaysian aaa. Three Seven Zero

AS EXPECTED IN PRIOR TRANSMISSIONS FREQUENCY WAS INCLUDED

01:19 TRANSMISSION FREQUENCY OMITTED

01:19:24	ATC	Malaysian Three Seven Zero contact Ho Chi Minh one two zero decimal nine Good Night
01:19:29	MH 370	Good Night Malaysian aa.. Three Seven Zero

VERY UNSUAL FOR A TRAINING CAPTAIN NOT TO READ BACK THE FREQUENJCY

WHY WAS FREQUENCY MISSING?

Discrepancies – ATC Audio

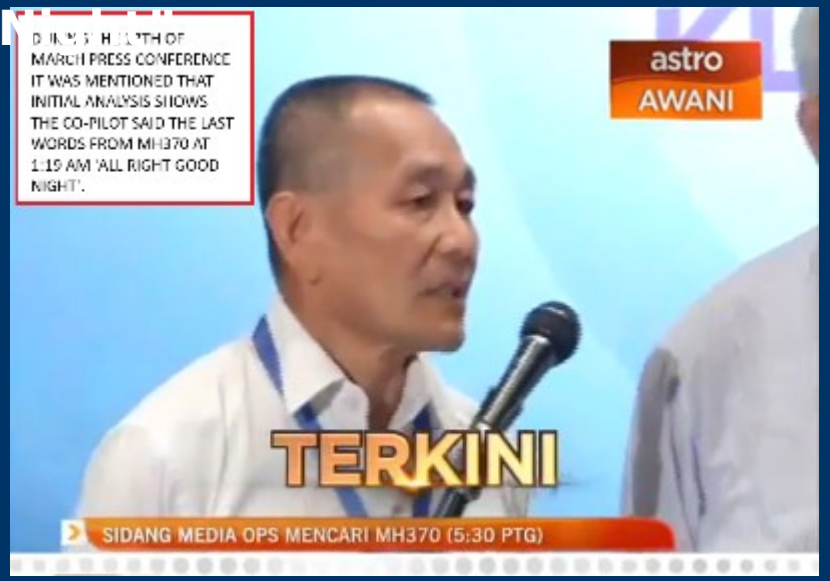
ID A1 – ATC Audio: Change in Final Transmission

Initial report (1:19 AM): “All Right Good Night”

Revised Version (1 week later): “Good Night Malaysian 370”

Key issue: Why was the final transmission changed after initial reporting

17th March – “All Right Good Night”



One week later- “Good Night Malaysian 370”

Source: Malaysian authorities’ public statements

General ATC

ID B1 – ATC GENERAL – Flight Progress Strip not filled in

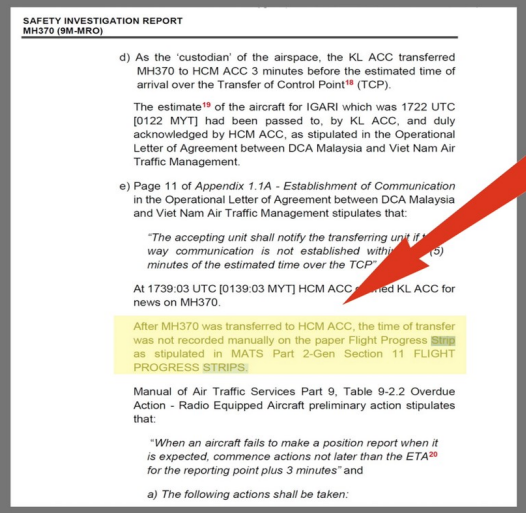
Expected Procedure: At airspace boundary (Malaysia Vietnam): Handover time is recorded on a flight progress strip

Expected Time: 05:19 UTC (1:19 AM Local)

What was found: No recorded handover time

HAND OVER TIME WAS OMITTED FROM FLIGHT

As stated in the Safety Investigation Report this was done.
If MH370 actually made it to IGARI the time of the transfer the time of the transfer would be written on the flight strip.
So again this supports the multiple other issues found to date that shows that MH370 did not make it to IGARI.



SAFETY INVESTIGATION REPORT
MH370 (9M-MRO)

d) As the 'custodian' of the airspace, the KL ACC transferred MH370 to HCM ACC 3 minutes before the estimated time of arrival over the Transfer of Control Point[18] (TCP).

The estimate[19] of the aircraft for IGARI which was 1722 UTC [0122 MYT] had been passed to, by KL ACC, and duly acknowledged by HCM ACC, as stipulated in the Operational Letter of Agreement between DCA Malaysia and Viet Nam Air Traffic Management.

e) Page 11 of *Appendix 1.1A - Establishment of Communication* in the Operational Letter of Agreement between DCA Malaysia and Viet Nam Air Traffic Management stipulates that:

"The accepting unit shall notify the transferring unit if [illegible] way communication is not established within [illegible] minutes of the estimated time over the TCP."

At 1739:03 UTC [0139:03 MYT] HCM ACC [illegible] KL ACC for news on MH370.

After MH370 was transferred to HCM ACC, the time of transfer was not recorded manually on the paper Flight Progress Strip as stipulated in MATS Part 2-Gen Section 11 FLIGHT PROGRESS STRIPS.

Manual of Air Traffic Services Part 9, Table 9-2.2 Overdue Action - Radio Equipped Aircraft preliminary action stipulates that:

"When an aircraft fails to make a position report when it is expected, commence actions not later than the ETA[20] for the reporting point plus 3 minutes" and

a) The following actions shall be taken:

The Safety Investigation report states that the flight strip was not filled in with hand-over time.

If MH370 actually made it to IGARI the hand over time of 1:19 AM should have been written on the flight slip.

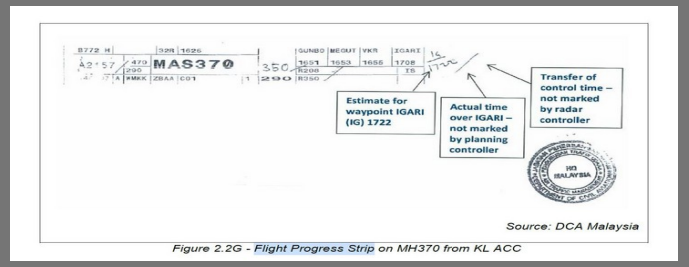

MAS370
Estimate for waypoint IGARI (IG) 1722
Actual time over IGARI – not marked by planning controller
Transfer of control time – not marked by radar controller
Source: DCA Malaysia

Figure 2.2G - Flight Progress Strip on MH370 from KL ACC

MISSING

HANDOVER TIME

Discrepancies – Civil Radar

ID C2 – Civil Radar: Turn Representation

Expected Track: A smooth curved arc toward IGARI

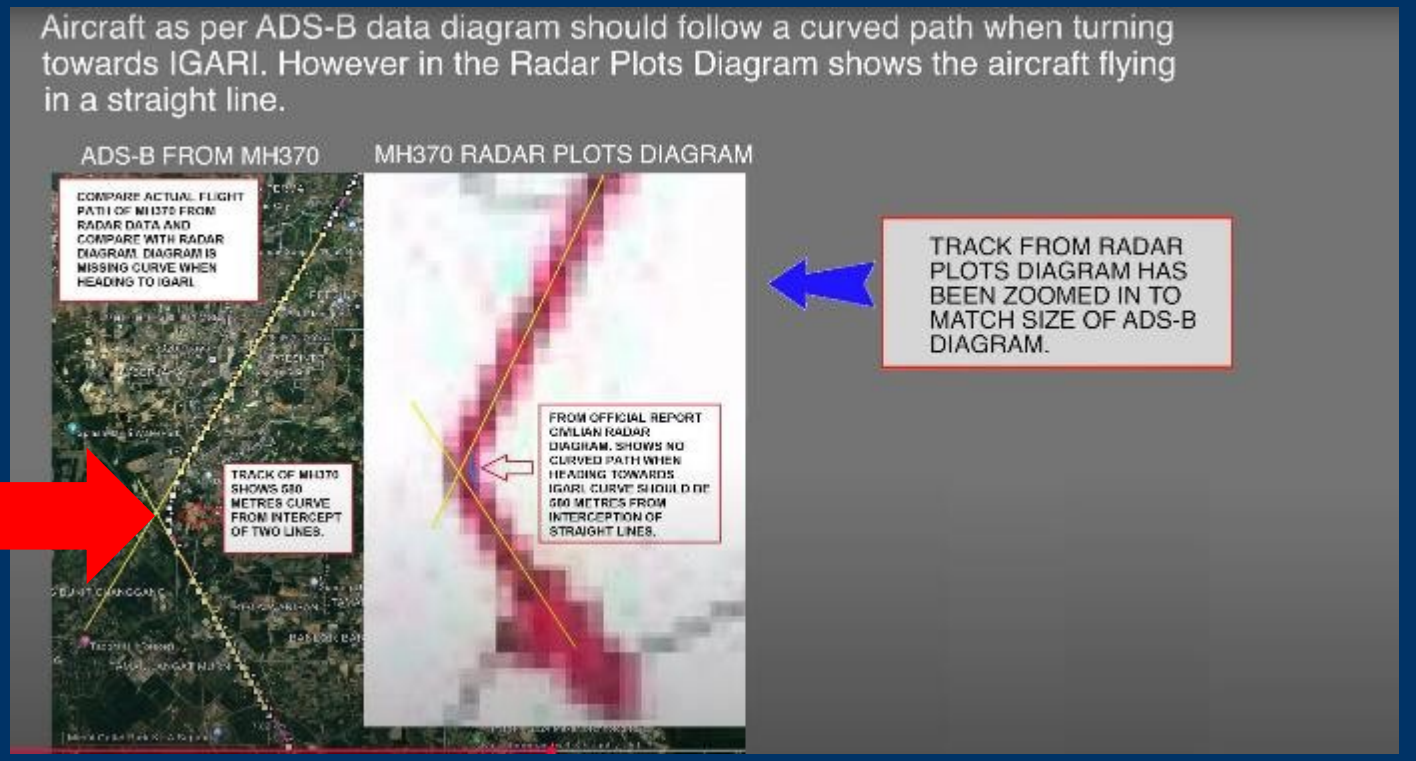
Reported Radar Track: Two intersecting straight lines

Key Observation: The shape does not match a typical aircraft turn

Key Question: Is this how the data was recorded – or how it was later represented?

TURN EXPECTED TO BE PLOTTED AS A CURVE –WAS SHOWN AS TWO INTERSECTING STRAIGHT LINES

AS EXPECTED ADS-B TRACK SHOWS A CURVE DURING THE TURN TO IGARI


Aircraft as per ADS-B data diagram should follow a curved path when turning towards IGARI. However in the Radar Plots Diagram shows the aircraft flying in a straight line.
ADS-B FROM MH370
MH370 RADAR PLOTS DIAGRAM
COMPARE ACTUAL FLIGHT PATH OF MH370 FROM RADAR DATA AND COMPARE WITH RADAR DIAGRAM. DIAGRAM IS MISSING CURVE WHEN HEADING TO IGARI
TRACK OF MH370 SHOWS 680 METRES CURVE FROM INTERCEPT OF TWO LINES.
FROM OFFICIAL REPORT CIVILIAN RADAR DIAGRAM. SHOWS NO CURVED PATH WHEN HEADING TOWARDS IGARI. CURVE SHOULD BE 680 METRES FROM INTERCEPTION OF STRAIGHT LINES.
TRACK FROM RADAR PLOTS DIAGRAM HAS BEEN ZOOMED IN TO MATCH SIZE OF ADS-B DIAGRAM.

Discrepancies – Civil Radar

ID C3 – Released civil radar data ends at 5.2°N.

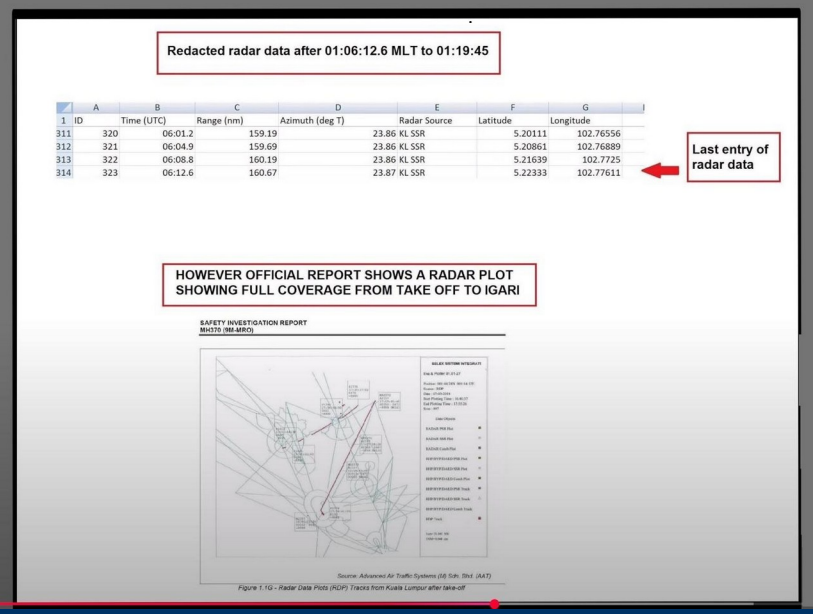
However, reports indicate tracking may have continued to ~6.9°N (near IGARI).

If so, the absence of this additional data in public releases is unexplained.

why the full dataset was not released through to IGARI

WHY WAS 180 KILOMETRES OF RADAR DATA REDACTED

The Radar plots diagram shows MH370 from take off until it disappears off civilian radar around latitude 6.9 North. There should be no reason not to include all the raw radar data. However the data is redacted after latitude 5.2 North.


Redacted radar data after 01:06:12.6 MLT to 01:19:45
ID
Time (UTC)
Range (nm)
Azimuth (deg T)
Radar Source
Latitude
Longitude
320 06:01.2 159.19 23.86 KL SSR 5.20111 102.76556
321 06:04.9 159.69 23.86 KL SSR 5.20861 102.76889
322 06:08.8 160.19 23.86 KL SSR 5.21639 102.7725
323 06:12.6 160.67 23.87 KL SSR 5.22333 102.77611
Last entry of radar data
HOWEVER OFFICIAL REPORT SHOWS A RADAR PLOT SHOWING FULL COVERAGE FROM TAKE OFF TO IGARI
SAFETY INVESTIGATION REPORT
MH370 (9M-MRO)

This limits independent reconstruction of the aircraft's final tracked position.

**** Note 11 years after the aircraft went missing additional radar data was released. This data showed typical SSR radar inaccuracies which appear to be missing for the original data?***

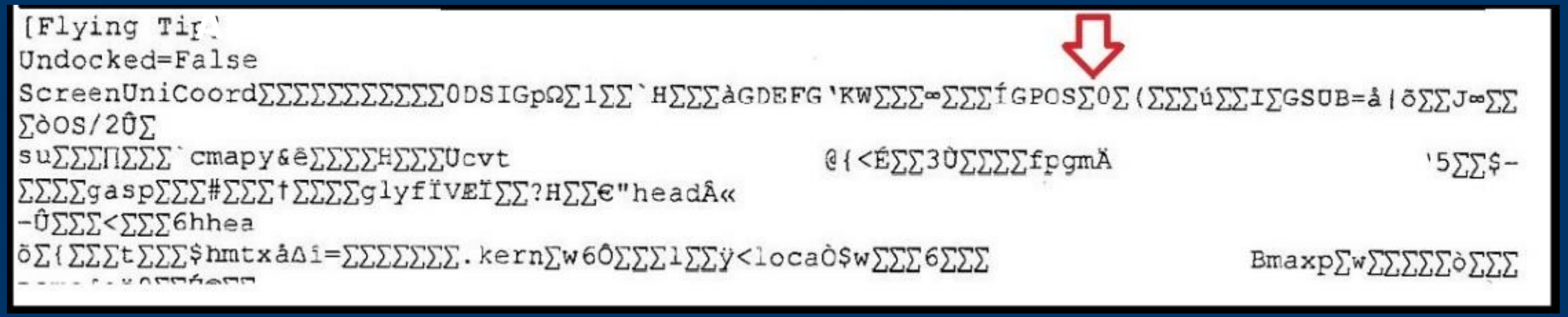
Discrepancies – Flight Simulator Data

ID D1 – Extensive Redaction of Flight Files

- 7 Flight simulator files recovered from the Captain's home
- >50% of data redacted in public released versions
- Redacted sections contain unprintable/corrupted-looking characters
- Australian Transport Safety Bureau states it holds nearly all original data

Key Issue: If data is intact , why does data appear corrupted**?**
Impact: Limits independent analysis of simulator activity.

REDACTED DATA – NOTE ADS-B HAVE VIRTUALLY



Discrepancies – Flight Simulator Data

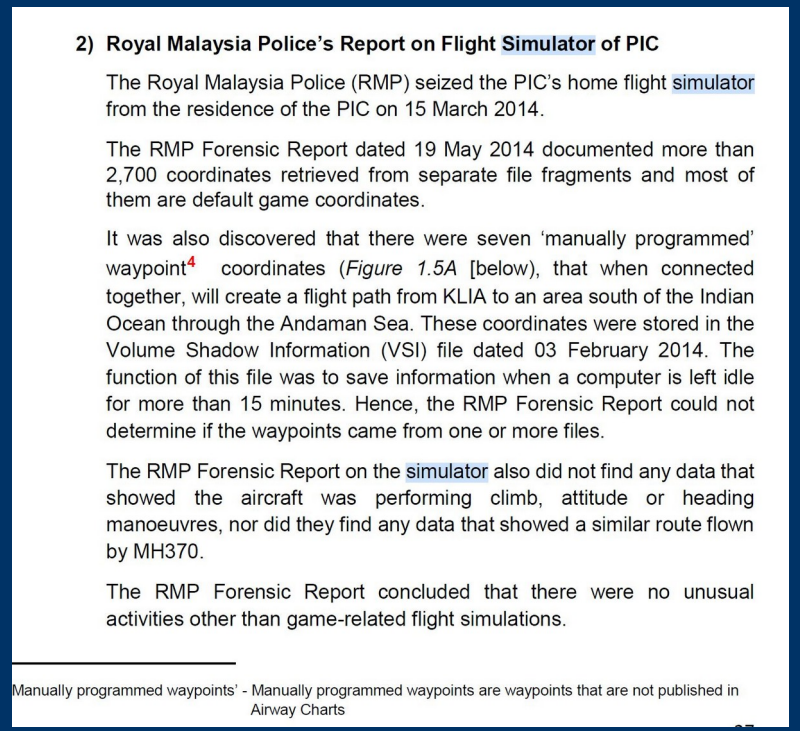
ID D2 – Volume Shadow Copy and File Timing

- Flight files recovered from Windows Volume Shadow Copy (system backup)
- Testing on comparable Windows 7 setup suggests: Temporary simulator files unlikely to be captured during live session.

Key Question: When were these files created or stored?

Implication: Possibility files were written after the aircraft's disappearance.

WHERE FLIGHT FILES FOUND



2) **Royal Malaysia Police's Report on Flight Simulator of PIC**

The Royal Malaysia Police (RMP) seized the PIC's home flight simulator from the residence of the PIC on 15 March 2014.

The RMP Forensic Report dated 19 May 2014 documented more than 2,700 coordinates retrieved from separate file fragments and most of them are default game coordinates.

It was also discovered that there were seven 'manually programmed' waypoint[4] coordinates (*Figure 1.5A* [below), that when connected together, will create a flight path from KLIA to an area south of the Indian Ocean through the Andaman Sea. These coordinates were stored in the Volume Shadow Information (VSI) file dated 03 February 2014. The function of this file was to save information when a computer is left idle for more than 15 minutes. Hence, the RMP Forensic Report could not determine if the waypoints came from one or more files.

The RMP Forensic Report on the simulator also did not find any data that showed the aircraft was performing climb, attitude or heading manoeuvres, nor did they find any data that showed a similar route flown by MH370.

The RMP Forensic Report concluded that there were no unusual activities other than game-related flight simulations.

Manually programmed waypoints' - Manually programmed waypoints are waypoints that are not published in Airway Charts

FLIGHT FILES COULD NOT HAVE BEEN FOUND IN BACKUP AREA

Impossible to save files

AI analysis noted that the technical report is unusually specific about the location of the data files said to represent the Captain's alleged route. According to the report, these files were found within a **Windows 7 Ultimate backup directory**.

At least **four of these files** were identified as **temporary files**—the type automatically generated whenever the simulated aircraft is repositioned using the computer mouse. Such files are deleted once the flight simulation session ends.

Under standard Windows 7 backup procedures, these **temporary files are not backed up**, meaning these particular files **should not have existed** in any subsequent automatic windows backup. The presence of these files within the backup therefore suggests that they were **created or inserted after the simulation session**, making it **highly improbable** that they originated from the Captain's own actions.

Discrepancies – Satellite Log and ACARS Data

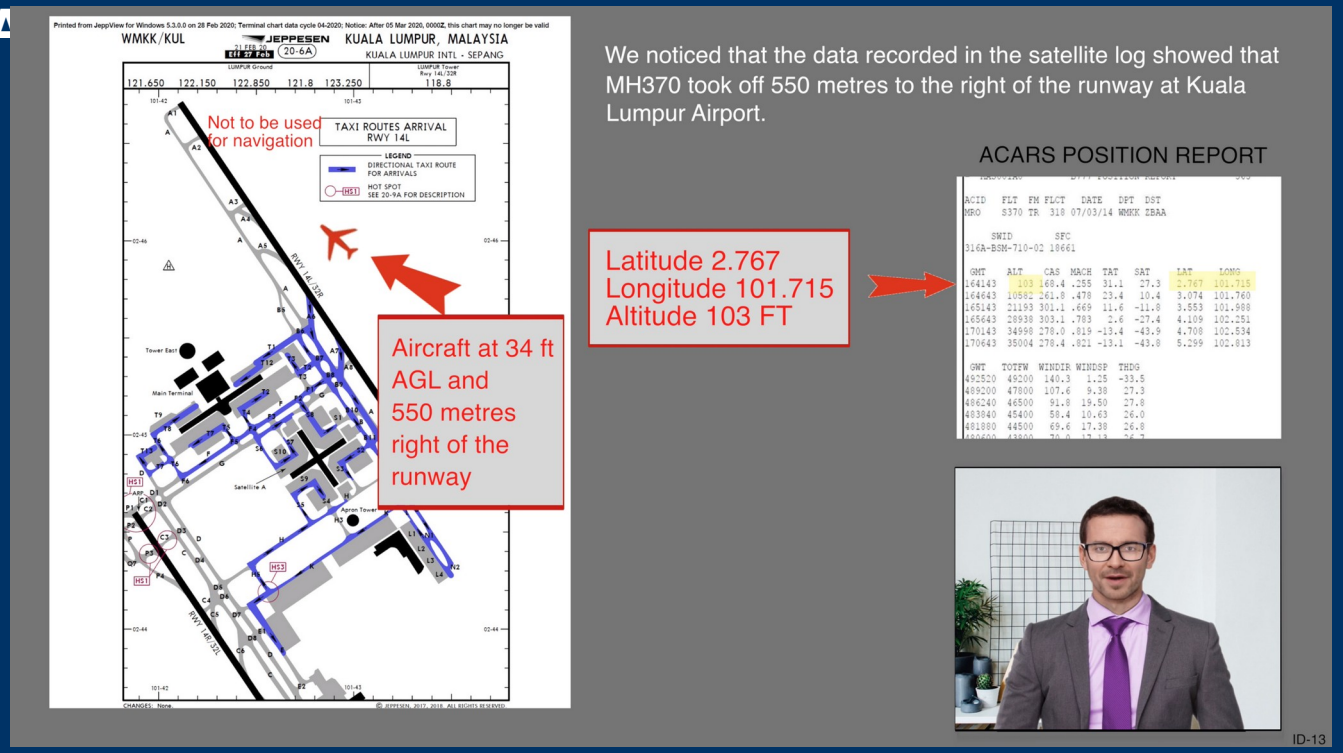
ID E3 – Apparent Lateral Drift on Take-off

- After ~1.6 km taxi, ACARS data show aircraft ~550 m right of the runway centreline
- Larger than expected for a Boeing 777-200ER

Cross-Check: Previous departure (Beijing) shows normal alignment

Key Question: Real positional deviation - or data anomaly?

ACARS SHOWS MH370 TAKING OFF 550 METRES TO THE RIGHT OF THE RUNWA


WMKK/KUL
JEPPESEN
KUALA LUMPUR, MALAYSIA
KUALA LUMPUR INTL - SEPANG
Not to be used for navigation
TAXI ROUTES ARRIVAL RWY 14L
Aircraft at 34 ft AGL and 550 metres right of the runway
We noticed that the data recorded in the satellite log showed that MH370 took off 550 metres to the right of the runway at Kuala Lumpur Airport.
ACARS POSITION REPORT
Latitude 2.767
Longitude 101.715
Altitude 103 FT
ID-13

Discrepancies – Satellite Log and ACARS Data

ID E6 –Post-Flight Revisions to ACARS Report

- 7 revisions identified after initial report release
- Reasons for revisions appear not to be documented

Key Question: What changed between versions – and why?

Impact: Creates uncertainty over which version is authoritative.

The Printed ACARS log appears to be edited

(1st Anomaly)

@ SIGNS ARE IN THE INCORRECT POSITION ON THE TRAFFIC LOG REPORT

THE '@' sign is in the correct position on pages 1,10, 11, 12, 13 and 14 but not so on pages 2,3,4,5,6,7,8 and 9.

So it is reasonable to believe the report has been edited.

The © sign can only be in the wrong position if the report has been edited.

CORRECT

Page 1 of 14

© SITA 2014 All Rights Reserved

INCORRECT

Page 2 of 14 ©

SITA 2014 All Rights Reserved

The Printed ACARS log appears to be edited

Footers of pages 6 - 10

Page 6 of 14 © Printed: March 11, 2014
SITA 2014 All Rights Reserved AS.V6R2.4

Page 7 of 14 © Printed: March 11, 2014
SITA 2014 All Rights Reserved AS.V6R2.4

Page 8 of 14 © Printed: March 11, 2014
SITA 2014 All Rights Reserved AS.V6R2.4

Page 9 of 14 © Printed: March 11, 2014
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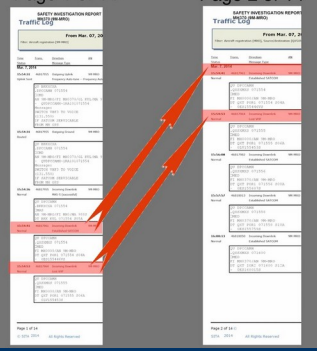
Page 10 of 14 Printed: March 11, 2014
© SITA 2014 All Rights Reserved AS.V6R2.4

The Printed ACARS log appears to be edited

(6th Anomaly)

Page 1 of 14 Page 2 of 14



The report must a combination of two reports as two transactions on page 1 are repeated on page 2.

So everything fits on one slide we have just shown the left side of the report.
The two transactions that are duplicated:

ID 46817961 - Time 15:54:41
ID 46817964 -Time 15:54:53

The Printed ACARS log appears to be edited

When a report is run a filter or no filter can be selected. Therefore only one option should appear on the header of each page. In this report there are two options shown which is not possible.

First page has no filter (all records will be extracted i.e. VHF and Satellite channels)

From Mar. 07, 2014 15:54:00 to Mar. 07, 2014 18:15:59

Filter: Aircraft registration [9M-MRO]

QXSXMXS means only show records from the Satellite communications channel

From Mar. 07, 2014 15:54:00 to Mar. 07, 2014 18:15:59

Filter: Aircraft registration [MRO], Source/destination [QXSXMXS]

ID-71

The Printed ACARS log appears to be edited

(7th Anomaly)

The Malaysian Safety report stated messages were transmitted every two minutes to 18:43 but in the printed ACARS log the last entry is 18:15. Therefore missing 28 minutes.

MISSING TRANSACTIONS FROM TRAFFIC LOG

TIME RANGE FROM SAFETY REPORT	TIME RANGE IN TRAFFIC LOG	MINUTES MISSING
18:03:23 - 18:43:33	18:03:23 - 18:15:25	28

Also Traffic log should cover the whole flight (i.e. 7/3/2014 18:03 to 8/3/2014 01:16). Therefore for a proper comprehensive aircraft investigation report there is 7 hours and 1 minutes missing.

The first message sent to the aircraft cockpit printer from the MAS ODC was at 1803:23 UTC. The ACARS message requested the crew to contact the HCM ACC immediately. The incoming downlink message at 1803:24 UTC showed the message failed to reach the aircraft. Messages are auto transmitted every 2 minutes and the message was retransmitted until 1843:33 UTC but all messages failed to get a response. Automated downlink message by ACARS showed 'failed'. Message sent to the aircraft cockpit printer and the Automated Downlink messages are shown in *Figures 1.9I* and *1.9J* (below), respectively.

Now last transaction was sent via VHF channel

The additional transactions on the later released report showed that a message was unsuccessfully transmitted to the aircraft via the VHF communications channel.

18:39:52 46820392 Outgoing Ground 9M-MRO MH0370 KUL MHKULKJACM001 071839 CMD BATAPCNX
Routed BATAP_TO_MSW

QU BKKXCXA
.DPCCAMH 071839
CMD
AN 9M-MRO/FI MH0370/GL KUL/MA 992I
- QUDPCCAMH-1DIS01071838
MESSAGE:
DEAR MH370. PLS ACK TEST MSG. RGDS/OC.

TRANSMITTED VIA VHF CHANNEL

Discrepancies – Flight Tracking Sites

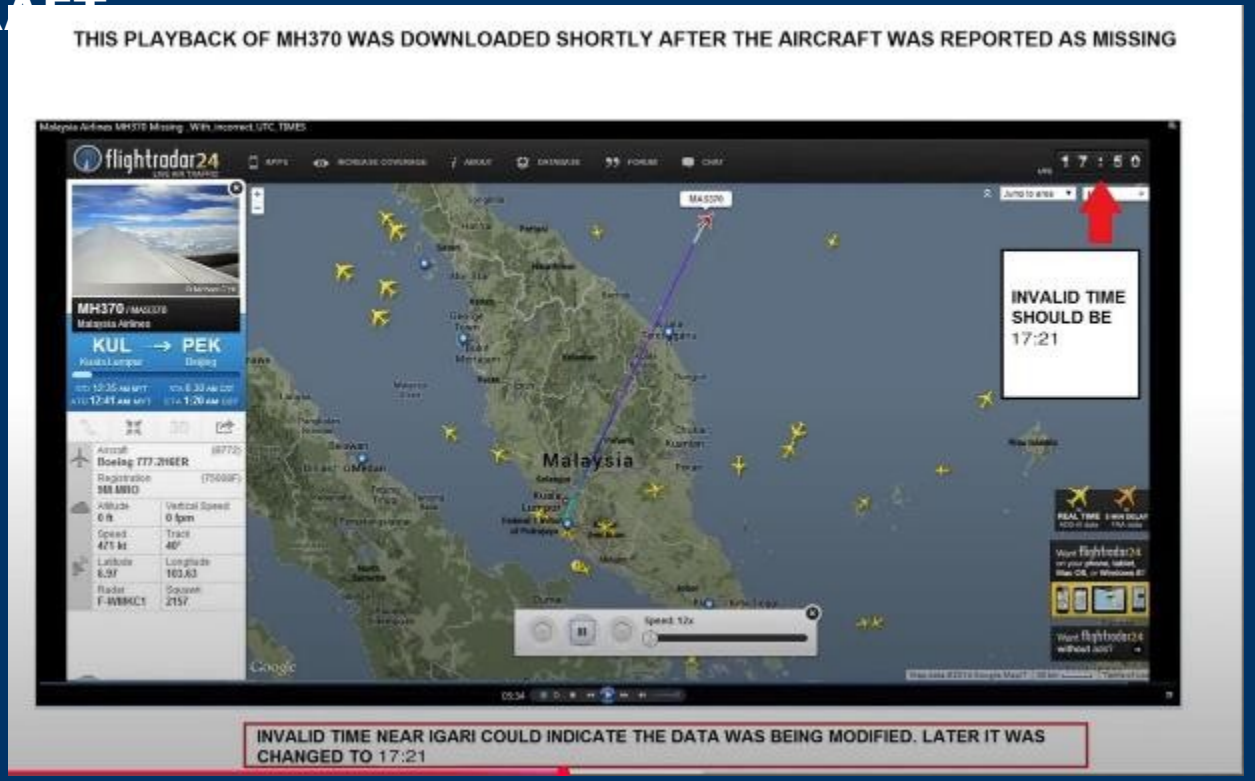
ID G1 – FlightRadar24 Timestamp Revision

- Early playback (post-event) showed aircraft near IGARI at 1:50 AM
- Later revised to 1:21 AM (~29 min difference)

Context: Flightradar24 data is based on aggregated ADS-B inputs

Key Question: What caused the timestamp revision?

EARLY PLAY BACK WITH ERRONEOUS TIME AT IGARI AND MISSING AIRCRAFT


THIS PLAYBACK OF MH370 WAS DOWNLOADED SHORTLY AFTER THE AIRCRAFT WAS REPORTED AS MISSING
flightradar24
17:50
MH370
KUL → PEK
Malaysia
INVALID TIME SHOULD BE 17:21
INVALID TIME NEAR IGARI COULD INDICATE THE DATA WAS BEING MODIFIED. LATER IT WAS CHANGED TO 17:21

Discrepancies – Flight Tracking Sites

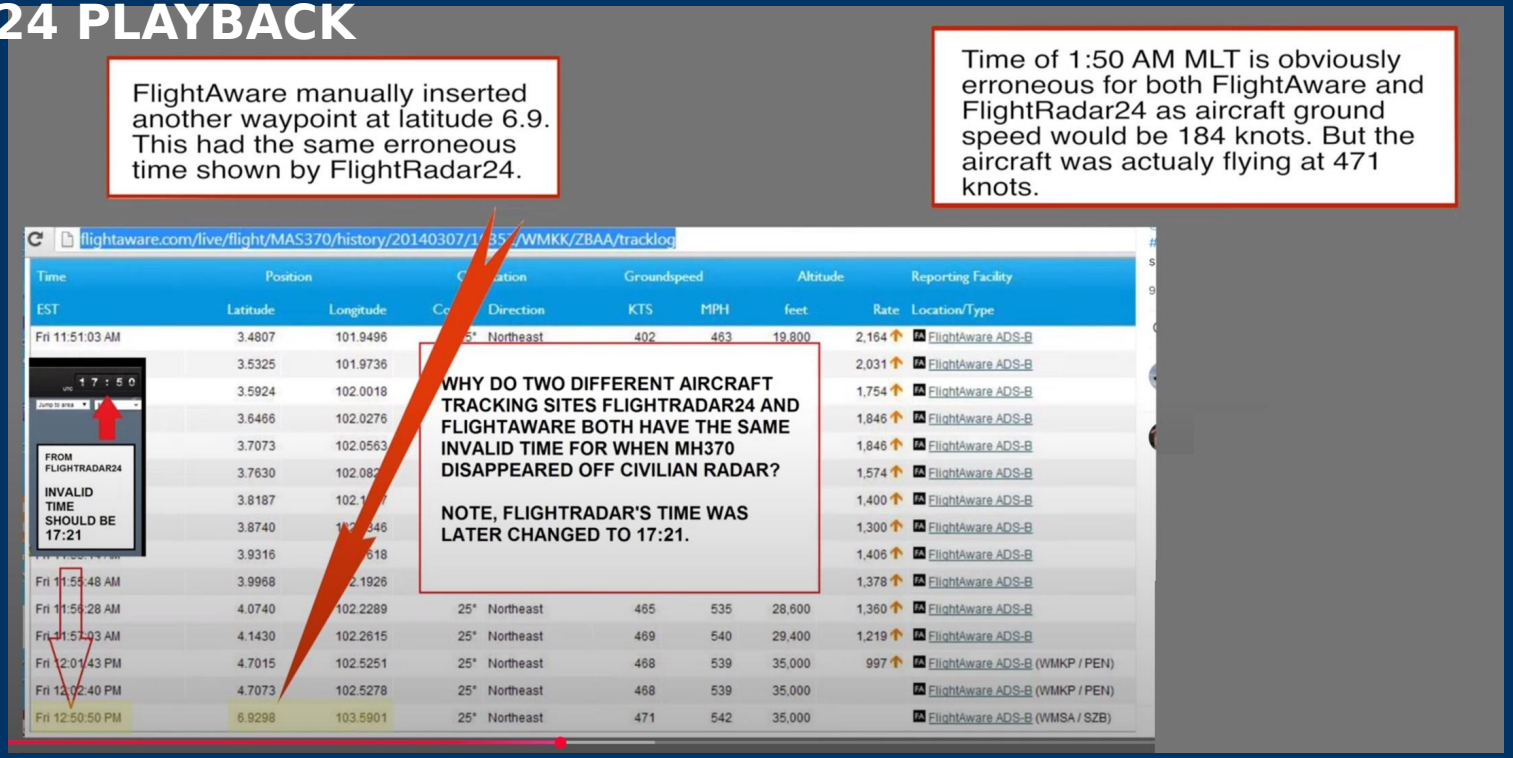
ID G2 – FlightAware Manual Entry & Timestamp

- FlightAware manually added post-flight ADS-B point near IGARI (~6.9 N)
- Live tracking ended earlier at ~4.7 N
- Inserted timestamp: 1:50 AM

Issue: 1:50 AM matches early FlightRadar24 data. Later revised to 1:21 AM

Impact: ~240 km of track manually added. Timeline inconsistency between sources

MANUAL ENTRY INSERTED NEAR IGARI WITH SAME ERRONEOUS TIME AS EARLY FLIGHTRADAR24 PLAYBACK


FlightAware manually inserted another waypoint at latitude 6.9. This had the same erroneous time shown by FlightRadar24.
Time of 1:50 AM MLT is obviously erroneous for both FlightAware and FlightRadar24 as aircraft ground speed would be 184 knots. But the aircraft was actualy flying at 471 knots.
flightaware.com/live/flight/MAS370/history/20140307/1
WMKK/ZBAA/tracklog
FROM FLIGHTRADAR24
INVALID TIME SHOULD BE 17:21
WHY DO TWO DIFFERENT AIRCRAFT TRACKING SITES FLIGHTRADAR24 AND FLIGHTAWARE BOTH HAVE THE SAME INVALID TIME FOR WHEN MH370 DISAPPEARED OFF CIVILIAN RADAR?
NOTE, FLIGHTRADAR'S TIME WAS LATER CHANGED TO 17:21.
Time
Position
Groundspeed
Altitude
Reporting Facility
EST
Latitude
Longitude
Direction
KTS
MPH
feet
Rate
Location/Type
Fri 11:51:03 AM 3.4807 101.9496 Northeast 402 463 19,800 2,164 FlightAware ADS-B
3.5325 101.9736 2,031 FlightAware ADS-B
3.5924 102.0018 1,754 FlightAware ADS-B
3.6466 102.0276 1,846 FlightAware ADS-B
3.7073 102.0563 1,846 FlightAware ADS-B
3.7630 1,574 FlightAware ADS-B
3.8187 1,400 FlightAware ADS-B
3.8740 1,300 FlightAware ADS-B
3.9316 1,406 FlightAware ADS-B
Fri 11:55:48 AM 3.9968 1,378 FlightAware ADS-B
Fri 11:56:28 AM 4.0740 102.2289 25° Northeast 465 535 28,600 1,360 FlightAware ADS-B
Fri 11:57:03 AM 4.1430 102.2615 25° Northeast 469 540 29,400 1,219 FlightAware ADS-B
Fri 12:01:43 PM 4.7015 102.5251 25° Northeast 468 539 35,000 997 FlightAware ADS-B (WMKP / PEN)
Fri 12:02:40 PM 4.7073 102.5278 25° Northeast 468 539 35,000 FlightAware ADS-B (WMKP / PEN)
Fri 12:50:50 PM 6.9298 103.5901 25° Northeast 471 542 35,000 FlightAware ADS-B (WMSA / SZB)

Discrepancies – Flight Tracking Sites

ID G5 – Additional ADS-B Data (FlightRadar24)

- Flightradar24 recorded ~28 seconds additional ADS-B data
- Equivalent to ~50 extra transmissions
- Not present in official Malaysian ADS-B log

Key Question: Why does a public domain platform show more data than in the official record?

Impact: Uncertainty over data completeness and authority

IT APPEARS ADS-B LOG FOR MISSING 28 SECONDS OF DATA (AROUND 50 TRANSACTIONS)?

Extract from the Malaysian ADS-B log

62433.1	226407	MAS370	_	0	0	2157	350	75008F	6.929675	103.5904
62433.61	226418	MAS370	_	314.9968	349.9991	2157	350	75008F	6.930275	103.591
62434.15	226428	MAS370	_	0	0	2157	0	75008F	6.931273	103.5919
62434.55	226437	MAS370	_	318.9723	346.977	2157	0	75008F	6.931917	103.5925

Time Last entry is 17:20:35 UTC

Extract from FlightRadar24

```
[6.78333,103.512,35000,473, 25,"2157",1394212757,"F-WMKC1"]
[6.8,    103.52, 35000,474, 25,"2157",1394212768,"F-WMKC1"]
[6.90314,103.57, 35000,472, 28,"2157",1394212818,"F-WMKC1"]
[6.93,   103.59, 35000,471, 40,"2157",1394212835,"F-WMKC1"]
[6.97,   103.63, 35000,471, 40,"2157",1394212863,"F-WMKC1"]
```

Time Last entry is 17:21:03 UTC

LAST FLIGHTRADAR24 ENTRY IS 28 SECONDS LATER THAN ADS-B ENTRY. THEREFORE ADS-B LOG IS MISSING OVER 50 ENTRIES (STORES ONE EVERY HALF SECOND).

Discrepancies – Flight Tracking Sites

ID G7 – Inconsistent Data Rounding

- Flightradar24 data typically use ~5 decimal places
- Some of the final entries rounded to 1-2 decimal places

Issue: Sudden reduction in positional precision

Key Question: Why does rounding change at the end of the dataset?

ROUNDING ISSUES SEEMS TO POINT TO POSSIBLE POST FLIGHT MODIFICATIONS

Rounding was to five decimal places (except for 6 out of 63)

Normally computer programs that import data in this case from the ADS-B receivers perform the same logic for each entry imported. It is a bit strange that towards the end of the file the rounding changes from 5 decimal places to two decimal places and to one entry to just on decimal place for some entries.

Please see Appendix B - Data returned to Paul after API call to FlightRadar24 server for MH370.

Examples are:

Latitude	Number Decimal Places
2.89041	5
2.97043	5
5.66496	5
6.58	2
6.8	1
6.93	2

That's about 6 out of 63 have been rounded to two or one decimal places and all are found towards the end of the file.

Extract from FlightRadar24 data

```
[5.16255,102.743,35000,467, 25,"2157",1394211938,"T-WMKN1"],
[5.28712,102.802,35000,468, 25,"2157",1394212004,"F-WMKC1"],
[5.41933,102.864,35000,469, 25,"2157",1394212070,"F-WMKC1"],
[5.54037,102.922,35000,470, 25,"2157",1394212131,"F-WMKC1"],
[5.66496,102.981,35000,471, 25,"2157",1394212193,"F-WMKC1"],
[5.78574,103.038,35000,472, 25,"2157",1394212255,"F-WMKC1"],
[5.909,   103.096,35000,472, 25,"2157",1394212316,"F-WMKC1"],
[6.03113,103.154,35000,472, 25,"2157",1394212378,"F-WMKC1"],
[6.15088,103.211,35000,472, 25,"2157",1394212439,"F-WMKC1"],
[6.27365,103.27, 35000,472, 25,"2157",1394212501,"F-WMKC1"],
[6.39583,103.328,35000,472, 25,"2157",1394212562,"F-WMKC1"],
[6.5197, 103.386,35000,473, 25,"2157",1394212624,"F-WMKC1"],
[6.58,    103.41, 35000,473, 25,"2157",1394212659,"F-WMKC1"],
[6.68,    103.46, 35000,473, 25,"2157",1394212719,"F-WMKC1"],
[6.78333,103.512,35000,473, 25,"2157",1394212757,"F-WMKC1"],
[6.8,     103.52, 35000,474, 25,"2157",1394212768,"F-WMKC1"],
[6.90314,103.57, 35000,472, 28,"2157",1394212818,"F-WMKC1"],
[6.93,    103.59, 35000,471, 40,"2157",1394212835,"F-WMKC1"],
[6.97,    103.63, 35000,471, 40,"2157",1394212863,"F-WMKC1"]
```

*Note 63 entries were saved from the ADS-B transmission from MH370.
Also contrary to what was said one of the six entries was rounded to three decimal places.

Discrepancies – ADS-B Data

ID I4 – Implausible Timing in ADS-B Records

- Recent ADS-B release from Genting receiver
- Some records show extremely small gaps between:
  - Latitude
  - Longitude
  - Altitude

Issue: Gaps appear shorter than ADS-B transmission limits

Key Question: Is this raw transmission data or processed/reconstructed data?

Impact: Raises uncertainty over data authenticity

IT APPEARS GENTING ADS-B DATA MIGHT NOT HAVE COME DIRECTLY FROM MH370

1	ToD	lat	lon	galt	GS	TA	CS	GAP	Less than .25
38	60130.04688	2.7838432	101.69811	900	188.3057	324.9755859	MAS370	1.4063	
39	60130.57031	2.7842187	101.69785	900	188.5254	325.3985595703125	MAS370	0.5234	
40	60130.61719	2.784289	101.69783	925			MAS370	0.0469	0.0469
41	60131.53906	2.7849644	101.69738	950	188.0859	325.6512451171875	MAS370	0.9219	
42	60132.04688	2.7853560	101.69710	950	188.0859	325.6512451171875	MAS370	0.5078	
43	60133.04688	2.7860856	101.69661	950	188.3057	326.0742188	MAS370	1.0000	
44	60133.46094	2.7863752	101.69644	1000	188.5254	326.4916992	MAS370	0.4141	
45	60133.75781	2.7864986	101.69638	1050			MAS370	0.2969	
46	60134.34375	2.7869063	101.6961	1075	188.0859	326.7498779296875	MAS370	0.5859	
47	60134.85938	2.787282	101.69587	1075	188.0859	326.7498779296875	MAS370	0.5156	
48	60135.35938	2.7877324	101.69559	1100	187.4268	327.0025634765625	MAS370	0.5000	
49	60135.90625	2.7881401	101.69534	1150	187.4268	327.0025634765625	MAS370	0.5469	
50	60136.47656	2.7884942	101.69511	1125	187.8662	327.4255371	MAS370	0.5703	
51	60136.94531	2.7889394	101.69484	1175	187.8662	327.4255371	MAS370	0.4688	
52	60137.1875	2.7891540	101.69471	1200			MAS370	0.2422	0.2422
53	60137.94531	2.7896046	101.69441	1225	187.207	327.6837158203125	MAS370	0.7578	

** ADS-B typically updates 1-2 times per second*

Discrepancies – ADS-B/Asterix data

ID I3 – ASCII Extract Appears Non-Aircraft Generated

- Released 11 years post-disappearance
- Data format and content inconsistent with standard ADS-B extraction protocols
- Large number of duplicate tracks not typical in ASTERIX processing

Key Question: Could this represent reconstructed or post flight data rather than raw transmissions?

Impact: Limits confidence in reconstructing the aircraft's path

IT APPEARS ASTERIX DATA WAS NOT DIRECTLY SOURCED

1	Track (Asterix)	No of Times shown in Asterix file	Start Time	End Time	Time Difference (secs)	Track (ADS_B file)	How Many times same ADS-B track	ASTERIX HEX CODE
65	24.79065	2	16:59:22.63	16:59:23.18	0.55	25.21362305	4	A111
66	24.76868	3	16:59:23.69	16:59:25.27	1.58	25.26306152	8	9D11
67	26.07056	1	16:59:46.26	16:59:46.26	0	25.36193848	6	8A12
68	24.59839	1	16:59:50.97	16:59:50.97	0	25.24658203	2	7E11
69	24.52148	6	17:00:03.32	17:00:06.13	2.81	25.29052734	7	7011
70	25.88379	95	17:00:16.13	17:18:09.07	1072.94	25.39489746	95	6812
71	25.85083	31	17:00:28.30	17:10:25.25	596.95	25.33996582	33	6212

Makes no sense that changed 95 duplicate tracks are all changed to the same value.

* As Asterix track is re-calculated the large numbe of duplicate tracks in this file is inconsistent with standard ASTERIX data processing.

Discrepancies – Military Data

ID H2 – Thai Radar Suggests Alternative Track

- Reports from Royal Thai Air Force.
  - Aircraft initially turned back toward Kuala Lumpur
  - Then executed a right turn towards Butterworth Airbase
- Official report aircraft turned directly toward Penang

Key Question: Which radar data most accurately reflects the aircraft's path?

Impacts: Conflicting paths complicate trajectory reconstruction

THAILAND PRIMARY RADAR REPORTS A DIFFERENT FLIGHT PATH FOR MH370

Thailand spokesman Air Vice Marshall Montol stated in the press where their primary radar picked up MH370.

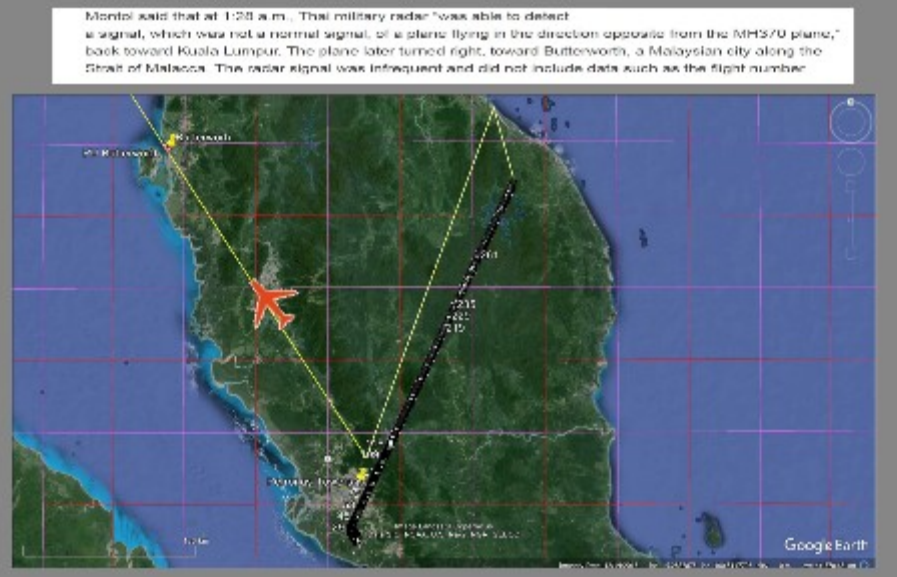
Flight 370 took off from Kuala Lumpur at 12:40 a.m. March 8 and its transponder, which allows air traffic controllers to identify and track it, ceased communicating at 1:20 a.m.

Montol said that at 1:28 a.m., Thai military radar "was able to detect a signal, which was not a normal signal, of a plane flying in the direction opposite from the MH370 plane," back toward Kuala Lumpur. The plane later turned right, toward Butterworth, a Malaysian city along the Strait of Malacca. The radar signal was infrequent and did not include data such as the flight number.

When asked why it took so long to release the information, Montol said, "Because we did not pay any attention to it. The Royal Thai Air Force only looks after any threats against our country." He said the plane never entered Thai airspace and that Malaysia's initial request for information in the early days of the search was not specific.

"When they asked again and there was new information and assumptions from (Malaysian) Prime Minister Najib Razak, we took a look at our information again," Montol said. "It didn't take long for us to figure out, although it did take some experts to find out about it."

Also later on in the flight it made a right turn and then headed towards the Butterworth air base.


Montol said that at 1:28 a.m., Thai military radar "was able to detect
a signal, which was not a normal signal, of a plane flying in the direction opposite from the MH370 plane,"
back toward Kuala Lumpur. The plane later turned right, toward Butterworth, a Malaysian city along the
Strait of Malacca. The radar signal was infrequent and did not include data such as the flight number.
Google Earth

Where we are up to so far

So far we have covered 16 of the 45 potential MH370 data discrepancies.

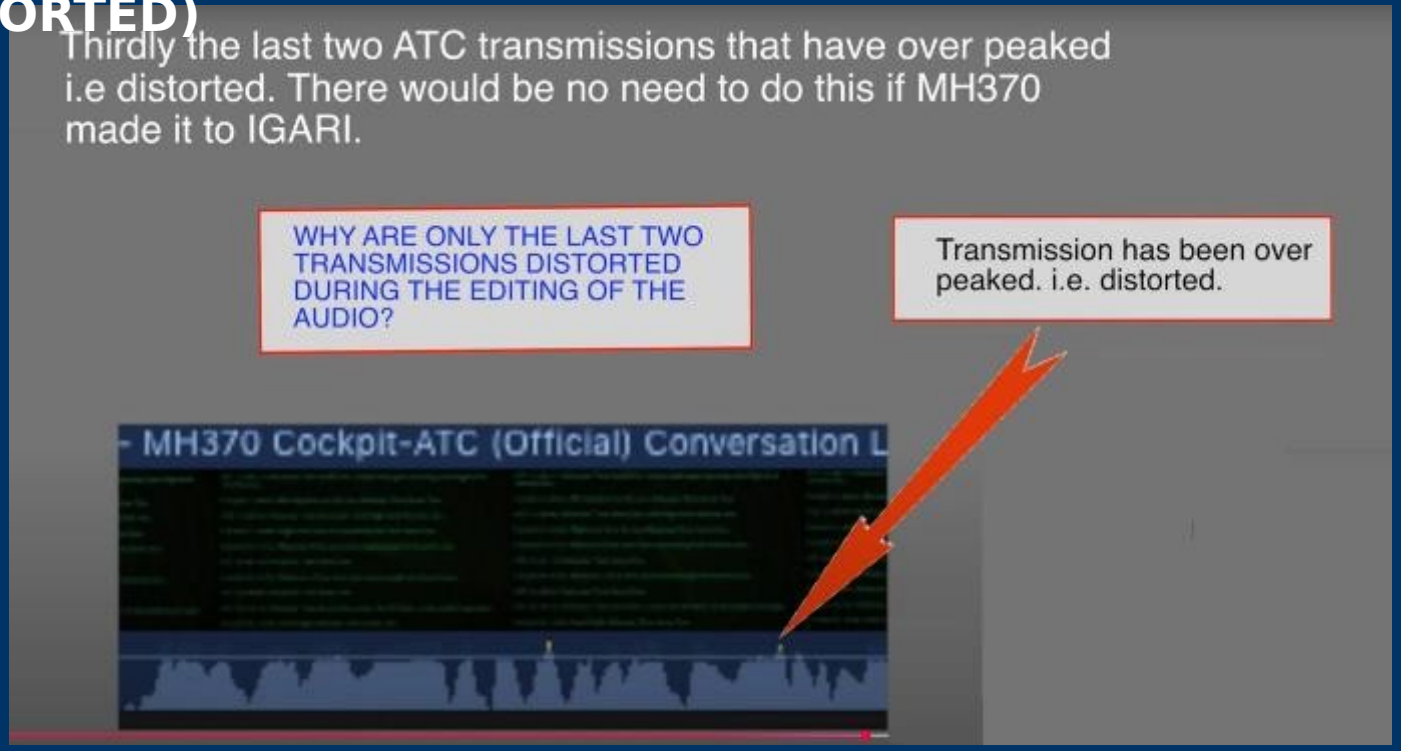
Discrepancies – ATC Audio

ID A3 – Over-peaked Final Transmissions

- Final two transmissions show audio clipping (over-peaking)
- Distortion most evident in second-to-last transmission
- Not typical for routine ATC handovers
- No clear operational reason for degraded audio quality

Question: *“Why would a routine transmission be distorted?”*

THE LAST TWO RADIO TRANSMISSIONS WERE OVERPEAKED (DISTORTED)


Thirdly the last two ATC transmissions that have over peaked i.e distorted. There would be no need to do this if MH370 made it to IGARI.
WHY ARE ONLY THE LAST TWO TRANSMISSIONS DISTORTED DURING THE EDITING OF THE AUDIO?
Transmission has been over peaked. i.e. distorted.
- MH370 Cockpit-ATC (Official) Conversation L

** Audio behaviour is inconsistent with normal ATC communication conditions*

Discrepancies – ATC Audio

ID A4 – Identity of Final Caller Changed

- Initial reports: First Officer made final call
- Later revised to: Captain
- Likely an innocent correction
- But relevant when assessing overall consistency of reported facts

Issue: Key detail changed over time — important in the context of broader discrepancies

Impact: If this detail changed, what else might have?

ONE WEEK LATER LAST RADIO CALL CHANGED TO CAPTAIN

Fifthly the initial investigation stated that the last radio transmission was from the Co-Pilot. Later on this was changed to the Captain.
"ALL RIGHT GOOD NIGHT"
"GOOD NIGHT MALAYSIAN 370"

Discrepancies – ATC Audio

ID A2 – Two Unsolicited FL350 Level Calls

- Two unpromptedFL350 confirmations within ~6 minutes
- No request from ATC
- Not typical in standard ATC communication
- Official report: No issues identified

Issue: Repeated, unsolicited altitude confirmations are operationally unusual

Impact: Suggests possible non-standard cockpit conditions or break from routine communication norms

& Adds to a pattern of minor anomalies in final phase of flight

OFFICIAL REPORT MENTIONS TWO UNSOLICTED LEVEL CALLS

14.	1701:17 UTC [0101:17 MYT]	MH370 reported maintaining FL350.	It was noticed that the PIC made the same statement of *"maintaining flight level three five zero'* twice at 1701:17 UTC [0101.17 MYT] and at 1707:56 UTC [0107:56 MYT].
15.	1707:56 UTC- [0107:56 MYT]	MH370 reported maintaining FL350.	• However, the Team did not find any significance of that statement spoken twice by PIC in a short interval of 6.39 minutes.

TWO UNSOLICTED LEVEL

01:01:14	MH 370	Malaysian aa..Three Seven Zero maintaining level three five zero
01:01:19	ATC	Malaysian Three Seven Zero
01:07:55	MH 370	Malaysian aa.. Three Seven Zero maintaining level three five zero
01:08:00	ATC	Malaysian Three Seven Zero

OFFICIAL REPORT INDICATES NO ISSUES

WE CONCLUDE AIRCREW EXIBITING STRANGE BEHAVIOUR

Overview of Discrepancies – General ATC

ID B2 – 19-Minute Delay with Failed Handover

- Failed ATC handover typically queried within ~5 minutes
- Vietnam queried Malaysia after 19 minutes
- Significantly longer than expected
- Possible procedural delay or breakdown

Issue: Delayed recognition of failed handover between ATC regions

Impact: Suggests deviation from standard ATC response timing & Contributes to uncertainty in the timeline of early events

NORMAL TIME TO QUERY FAILED HAND-OVER IS UNDER 5 MINUTES – MALAYSIA TOOK 19

The standard maximum time the Vietnam Air Traffic Controllers should take with a missed hand over is 5 minutes. It would be very unlikely they would take as long as 17 minutes. However this time period would make more sense if MH370 never made it to IGARI and hence was never handed over.

e) At 17:38:54 UTC (IGARI plus **16:54 minutes**), after a number of attempts to communicate on main and emergency frequencies directly and through indirect contacts (via other aircraft) with MH370, Ho Chi Minh ACC informed Kuala Lumpur that they had no radio and no radar contact with the aircraft.

Discrepancies – ATC Audio

ID A5 – Reported Time of Final Transmission Revised

Early reports placed MH370's final ATC transmission at 1:07 AM, later revised to 1:19 AM. The earlier time would place the aircraft before IGARI; the revised time aligns with its expected position near the waypoint.

Issue: Initial public reporting of the final transmission time was inconsistent, with a 12-minute difference between early and revised statements.

Impact: While minor in isolation, this discrepancy affects reconstruction of the aircraft's position during a critical handoff phase and contributes to broader uncertainty in the early timeline.

LAST TRANSMISSION TIME CHANGED FROM 1:07 AM TO 1:19 AM

Discrepancies – Civil Radar

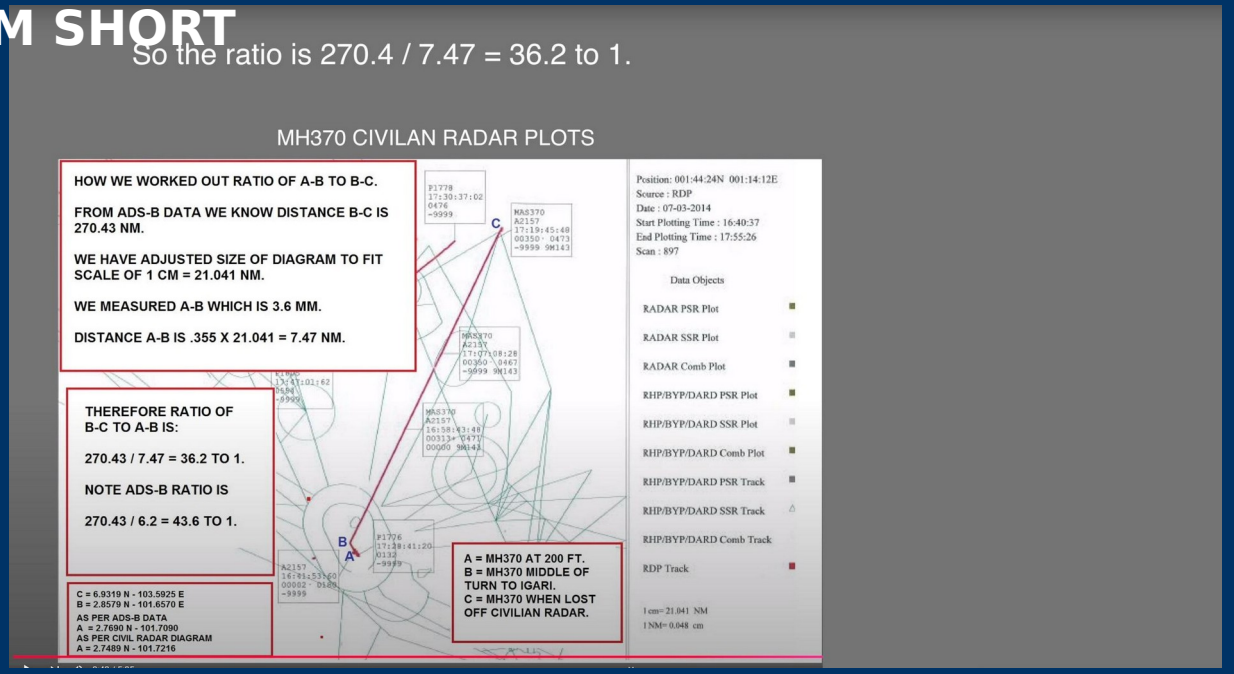
ID C1 – Inconsistent Distances on Civil Radar Plot

Distance measurements along the civil radar track—from mid-turn through IGARI to transponder loss—appear approximately **80 km shorter than expected** based on aircraft speed and elapsed time.

Issue: The plotted radar track does not align with expected distance calculations, suggesting possible scaling inaccuracies or non-source-derived reconstruction.

Impact: Raises uncertainty about whether the radar plot reflects raw data or a manually reconstructed path, affecting confidence in spatial accuracy during a critical phase of flight.

USING RATIOS DISTANCE TO NEAR IGARI ABOUT 80 KM SHORT


So the ratio is 270.4 / 7.47 = 36.2 to 1.
MH370 CIVILAN RADAR PLOTS
HOW WE WORKED OUT RATIO OF A-B TO B-C.
FROM ADS-B DATA WE KNOW DISTANCE B-C IS 270.43 NM.
WE HAVE ADJUSTED SIZE OF DIAGRAM TO FIT SCALE OF 1 CM = 21.041 NM.
WE MEASURED A-B WHICH IS 3.6 MM.
DISTANCE A-B IS .355 X 21.041 = 7.47 NM.
THEREFORE RATIO OF B-C TO A-B IS:
270.43 / 7.47 = 36.2 TO 1.
NOTE ADS-B RATIO IS
270.43 / 6.2 = 43.6 TO 1.
C = 6.9319 N - 103.5925 E
B = 2.8579 N - 101.6570 E
AS PER ADS-B DATA
A = 2.7690 N - 101.7090
AS PER CIVIL RADAR DIAGRAM
A = 2.7489 N - 101.7216
A = MH370 AT 200 FT.
B = MH370 MIDDLE OF TURN TO IGARI.
C = MH370 WHEN LOST OFF CIVILIAN RADAR.
Position: 001:44:24N 001:14:12E
Source : RDP
Date : 07-03-2014
Start Plotting Time : 16:40:37
End Plotting Time : 17:55:26
Scan : 897
Data Objects
RADAR PSR Plot
RADAR SSR Plot
RADAR Comb Plot
RHP/BYP/DARD PSR Plot
RHP/BYP/DARD SSR Plot
RHP/BYP/DARD Comb Plot
RHP/BYP/DARD PSR Track
RHP/BYP/DARD SSR Track
RHP/BYP/DARD Comb Track
RDP Track
1 cm= 21.041 NM
1 NM= 0.048 cm

** Note: Measurements were derived using proportional scaling on a small diagram; as such, the discrepancy could be attributable to measurement error.*

Discrepancies – Civil Radar

ID C4 – Missing Regional Radar and ATC Data

Civil radar data from Thailand, Vietnam, and Singapore has not been publicly released. Additionally, no ATC audio or transcripts from Vietnam—responsible for MH370 following handover—have been made available.

Issue: Key regional radar data and expected ATC communications are absent from the public record.

Impact: Limits transparency and creates gaps in the reconstructed timeline, reducing the ability to independently verify events during a critical transition phase.

MISSING RADAR DATA THAILAND

MISSING RADAR

MISSING RADAR

MISSING ATC AUDIO

Discrepancies – Satellite Log and ACARS Data

ID E1 – ACARS vs ADS-B Speed Mismatch

ACARS and ADS-B both derive speed and position from onboard navigation systems and would be expected to closely align. However, ACARS data appears to show progressively higher speeds than ADS-B.

Issue: Reported speeds diverge between ACARS and ADS-B despite a shared data source.

Impact: Suggests potential timing, processing, or data integrity issues, reducing confidence in the consistency of onboard-derived datasets.

ACARS DATA SHOWS AIRCRAFT FLYING PROGRESSIVELY FASTER COMPARED WITH ADS-B DATA

MATCHING MH370 ACARS POSITIONS WITH ADS-B DATA BY TIME

What	ACARS LAT LONG	ACARS TIME	CLOSEST ADS-B TIME	Ground Speed ADS-B/ACARS	Closest matching ADS-B LAT/LONG from log	Extrapolated matching ADS-B LAT/LONG	Measured East Drift using ADS-B data (m)	East Drift taken from measuring tracks on Google Earth	Calculated N/S Drift (m)	Extra East drift with calculated with matching ADS-B data.	Distance ADSB- match to ACARS with drift removed distance (m) / time secs
ACARS3	3.553/101.988	16:51:43	16:51:43.3	414.2/413	3.547945/101.9809	3.5475/101.980555	827	552	N 0	275	668/3.08
CLIMB	3.619/102.02	16:52:21	16:52:21.4	417/417	3.614228/102.0122	3.61361/102.011944	895	612	S 87	283	736/3.35
ACARS4	4.109/102.251	16:56:43	16:56:43.2	455/469	4.102509/102.2424	4.102222/102.242222	972	612	S 93	360	915/3.78
ACARS5	4.708/102.534	17:01:43	17:01:42.7	468.1/470	4.699493/102.5241	4.7/102.524444	1060	648	N 0	412	978/3.93
ACARS6	5.299/102.813	17:06:43	17:06:42.9	469.1/471	5.289461/102.8029	5.28972/102.803055	1099	611	N28	488	1106/4.5

WHEN MEASURING EAST IRS DRIFT ON GOOGLE EARTH THERE IS MINIMAL DRIFT VARIATION. THE LAST FOUR POSITIONS ARE 612 M, 612 M , 648 M AND 611 M. THIS IS JUST A VARIATION OF 648-611 = 37 M.

HOWEVER WHEN MATCHING THE ACARS POSITIONS WITH THE CORRESPONDING ADS-B POSITIONS THERE ARE TWO MAJOR ISSUES.

ISSUE 1 - THERE ARE LARGE VARIATIONS WITH THE EAST IRS DRIFT. THE LARGEST BEING AN ADDITIONAL 488 METRES OVER THE ACARS DRIFT.

ISSUE 2 - AS THE FIGHT PROGRESSES THERE IS A CONTINUOUS INCREASE IN THE EAST IRS DRIFT. HOWEVER WHEN MEASURING THE ACARS DRIFT ON GOOLE EARTH THERE IS MINIMAL VARIATION (FOR EXAMPLE THE LAST FOUR POSITIONS JUST VARY BY 37 M). THE CALCULATED DRIFT ON ACARS DATA WHEN MATCHED WITH THE ADS-B DATA FROM SHOULD BE THE SAME AS THE ACARS DATA AS DRAWN ON GOOGLE EARTH.

I.E. 275-->283-->330-->412-->488. (Figures are in meters).

THIS IMPLIES THAT FOR THIS TO OCCUR THERE APPEAR TO BE SOME CHANGES MADE TO THE ACARS POSITIONS. IF THE DATA WAS ALL ORIGINALLY FROM MH370 THEN IT SHOULD ALL TIE UP. IN OTHERWORDS THERE WOULD BE A VERY CLOSE MATCH WITH THE ADS-B DATA.

IN A NUTSHELL. THE ADS-B POSITIONS DO NOT TIE UP WITH THE ACARS POSITIONS.

Discrepancies – Satellite Log and ACARS Data

ID E2 – Inconsistent Retry Counts for “Contact Ho Chi Minh” Messages

ACARS data is derived from satellite logs and later compiled into reports. However, the ACARS report shows significantly more retries of the failed “Contact Ho Chi Minh” message than are recorded in the underlying satellite log.

Issue: Retry counts differ between the satellite log (raw data) and the compiled ACARS report.

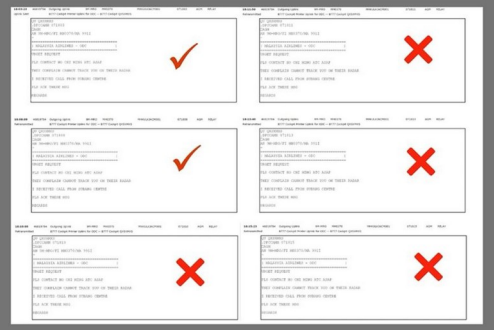
Impact: Raises concerns about data processing, completeness, or interpretation, reducing confidence in the consistency between primary and derived datasets.

MESSAGE RE-TRIES DOES NOT MATCH UP (SATELLITE LOG VERSUS ACARS REPORT)

Number of times failed message was re-transmitted differs between printed traffic log and satellite log.

(2nd Anomaly)

We detected that the printed traffic log showed the failed message was transmitted six times but the satellite showed only two.



ID	Comments	Data	Time
A	Request crew to contact Air Traffic control	+-!!!!!V!37183343 3% !!#!!35233217!!M!!!!n!2.9M-MRO!C1S!.DPCCAMH 0718031!AGM!!IAN 9M-MRO/FI MH0370/MA 991!!!- !!!!!!

Discrepancies – Satellite Log and ACARS Data

ID E4 – Unusually Long Response Time During 18:25 UTC Logon

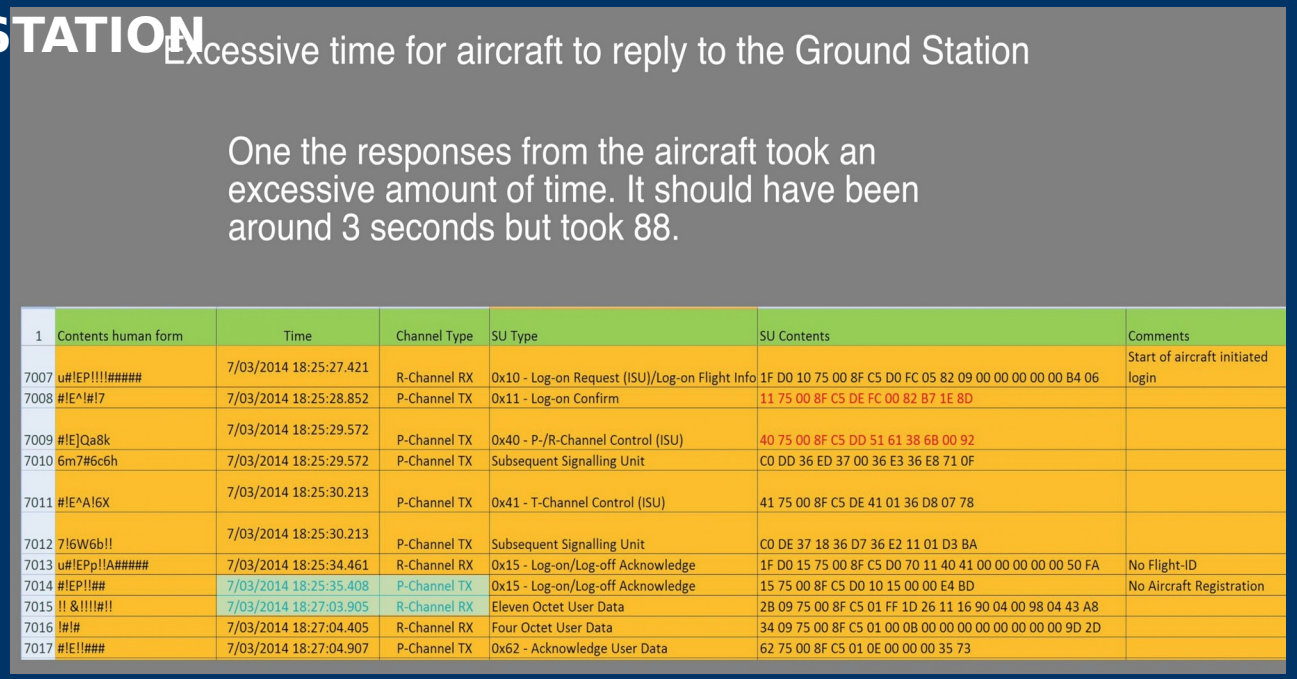
- Normal response time: ~4 seconds
- Observed response time: ~88 seconds

Issue: Response time ~20x longer than normal during critical logon event.

Impact:

- Raises questions about system integrity during logon.
- Suggests potential power interruption, system fault, or unknown interference.
- Remains unexplained in official accounts.

UNEXPLAINED EXCESSIVE TIME FOR AIRCRAFT TO RESPOND TO GROUND STATION


Excessive time for aircraft to reply to the Ground Station
One the responses from the aircraft took an excessive amount of time. It should have been around 3 seconds but took 88.

1	Contents human form	Time	Channel Type	SU Type	SU Contents	Comments
7007	u#!EP!!!#####	7/03/2014 18:25:27.421	R-Channel RX	0x10 - Log-on Request (ISU)/Log-on Flight Info	1F D0 10 75 00 8F C5 D0 FC 05 82 09 00 00 00 00 00 B4 06	Start of aircraft initiated login
7008	#!E^!#!7	7/03/2014 18:25:28.852	P-Channel TX	0x11 - Log-on Confirm	11 75 00 8F C5 DE FC 00 82 B7 1E 8D	
7009	#!E]Qa8k	7/03/2014 18:25:29.572	P-Channel TX	0x40 - P-/R-Channel Control (ISU)	40 75 00 8F C5 DD 51 61 38 6B 00 92	
7010	6m7#6c6h	7/03/2014 18:25:29.572	P-Channel TX	Subsequent Signalling Unit	C0 DD 36 ED 37 00 36 E3 36 E8 71 0F	
7011	#!E^A!6X	7/03/2014 18:25:30.213	P-Channel TX	0x41 - T-Channel Control (ISU)	41 75 00 8F C5 DE 41 01 36 D8 07 78	
7012	7!6W6b!!	7/03/2014 18:25:30.213	P-Channel TX	Subsequent Signalling Unit	C0 DE 37 18 36 D7 36 E2 11 01 D3 BA	
7013	u#!EPp!!A#####	7/03/2014 18:25:34.461	R-Channel RX	0x15 - Log-on/Log-off Acknowledge	1F D0 15 75 00 8F C5 D0 70 11 40 41 00 00 00 00 00 50 FA	No Flight-ID
7014	#!EP!!##	7/03/2014 18:25:35.408	P-Channel TX	0x15 - Log-on/Log-off Acknowledge	15 75 00 8F C5 D0 10 15 00 00 E4 BD	No Aircraft Registration
7015	!! &!!!!#!!	7/03/2014 18:27:03.905	R-Channel RX	Eleven Octet User Data	2B 09 75 00 8F C5 01 FF 1D 26 11 16 90 04 00 98 04 43 A8	
7016	!#!#	7/03/2014 18:27:04.405	R-Channel RX	Four Octet User Data	34 09 75 00 8F C5 01 00 0B 00 00 00 00 00 00 00 00 9D 2D	
7017	#!E!!###	7/03/2014 18:27:04.907	P-Channel TX	0x62 - Acknowledge User Data	62 75 00 8F C5 01 0E 00 00 00 35 73	

Discrepancies – Satellite Log and ACARS Data

ID E5 – Missing 46 Minutes from SU Sub-Log

Satellite logs include:

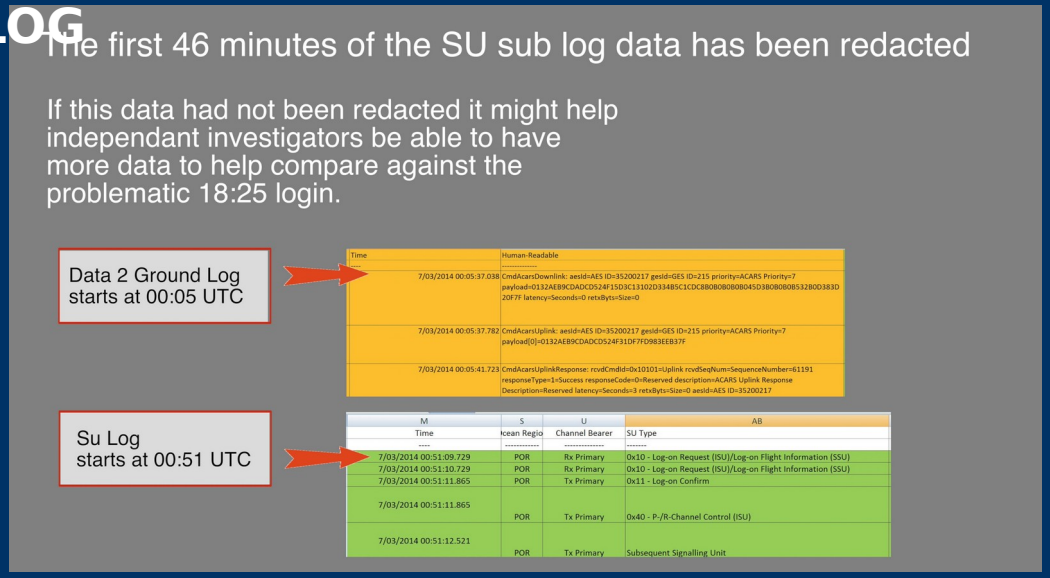
- SU (aircraft)
- GR (ground)

→ Expected to broadly align but ~46 minutes missing from SU sub-log

Issue: ~46-minute gap in aircraft (SU) log not reflected or explained. Giving a mismatch between expected SU-GR sub logs.

Impact: Creates uncertainty in the communications timeline, Limits ability to fully verify aircraft activity during this period and introduces an unexplained discrepancy.

46 MINUTES OF DATA MISSING FROM SATELLITE 'SU' SUB LOG



Discrepancies – Satellite Log and ACARS Data

ID E7 – Redacted VHF Message in Initial ACARS Report

- VHF message from Malaysian ops not received by aircraft.
- Message redacted from initial ACARS report; included later.
- Unclear how channel flipped from SATCOM to VHF as MH370 reportedly disabled VHF ACARS.

Issue: Redacted VHF message later reintroduced in official records & not clear how Malaysian Operations transmit channel flipped from SATCOM to VHF.

Impact: Raises questions about completeness and revision of official documentation + Creates uncertainty around actual communication pathways in use + Complicates interpretation of ACARS data and system status.

REDACTED VHF MESSAGE – HOW DID SYSTEM FLIP TO

Discrepancies – Satellite Log and ACARS Data

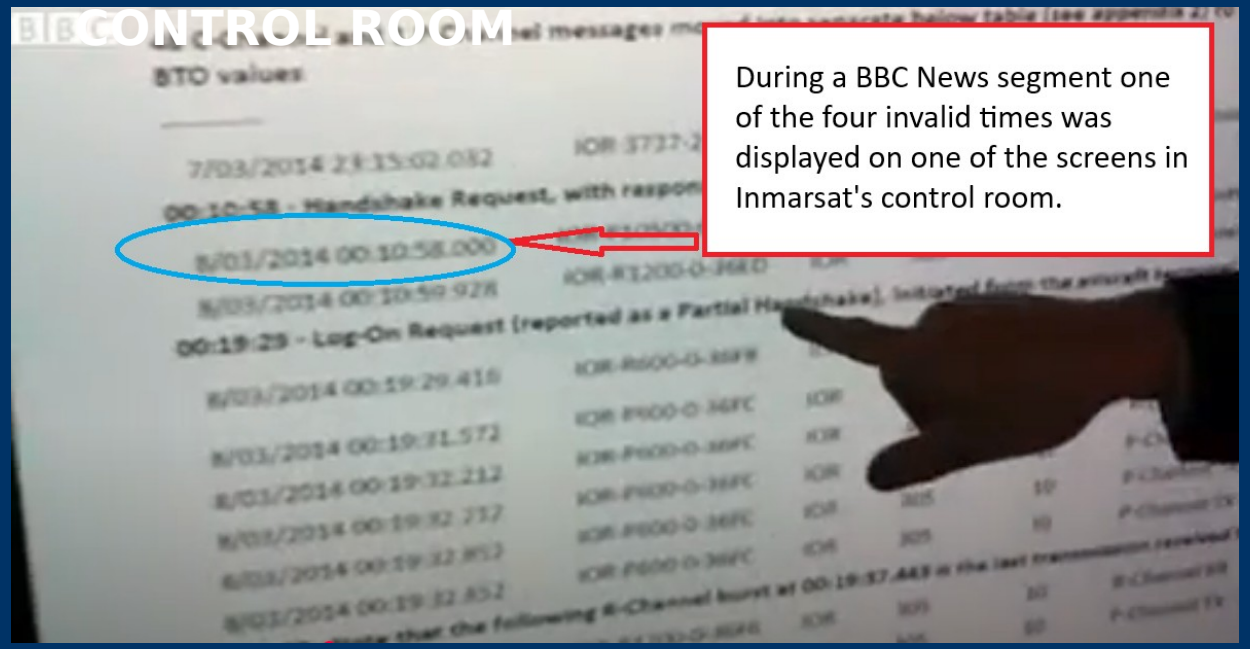
ID E8 – Redacted Satellite Log Timing Anomaly

- Initial observation: 4 timestamps with .000 millisecond values.
- Later assessment: likely introduced during data handling.
- .000 milliseconds unlikely in native system logs.

Issue: (.000) millisecond values in redacted log suggest possible integrity issue.

Impact: Likely post-processing artefact (e.g. Excel handling) + Reduces likelihood of source data issue + Shows sensitivity to handling/formatting.

INVALID TIME SHOWN IN INMARSAT CONTROL ROOM



FOUR INVALID TIMES SHOWN ON

Time	Channel Name	Ocean Region	GES ID (octal)	Channel Unit ID	Channel Type	SU Type	Burst Frequency Offset (Hz) BFO	Burst Timing Offset (microseconds) BTO
48 C-Channel and 1 P-Channel messages moved into separate below table (see appendix 2) to ease the reading of key events. C-Channel messages have no BTO values								
7/03/2014 23:15:02.032	IOR-3737-21000	IOR	305	6	C-Channel RX	0x30 - Call Progress - Channel Release	219	
00:10:58 - Handshake Request, with response								
8/03/2014 00:10:58.000	IOR-P10500-0-386B	IOR	305	10	P-Channel TX	0x14 - Log Control - Log-on Interrogation		
8/03/2014 00:10:59.928	IOR-R1200-0-36ED	IOR	305	4	R-Channel RX	0x15 - Log-on/Log-off Acknowledge	252	18040
00:19:29 - Log-On Request (reported as a Partial Handshake), initiated from the aircraft terminal								
8/03/2014 00:19:29.416	IOR-R600-0-36F8	IOR	305	10	R-Channel RX	0x10 - Log-on Request (ISU)/Log-on Flight Information (SSU)	182	23000
8/03/2014 00:19:31.572	IOR-P600-0-36FC	IOR	305	10	P-Channel TX	0x11 - Log-on Confirm		
8/03/2014 00:19:32.212	IOR-P600-0-36FC	IOR	305	10	P-Channel TX	0x40 - P-/R-Channel Control (ISU)		
8/03/2014 00:19:32.212	IOR-P600-0-36FC	IOR	305	10	P-Channel TX	Subsequent Signalling Unit		
8/03/2014 00:19:32.852	IOR-P600-0-36FC	IOR	305	10	P-Channel TX	0x41 - T-Channel Control (ISU)		
8/03/2014 00:19:32.852	IOR-P600-0-36FC	IOR	305	10	P-Channel TX	Subsequent Signalling Unit		
00:19:37 - Note that the following R-Channel burst at 00:19:37.443 is the last transmission received from the aircraft terminal								
8/03/2014 00:19:37.443	IOR-R1200-0-36F6	IOR	305	10	R-Channel RX	0x15 - Log-on/Log-off Acknowledge		
8/03/2014 00:19:38.407	IOR-P10500-0-386B	IOR	305	10	P-Channel TX	0x15 - Log-on/Log-off Acknowledge		
01:15:56 – Handshake Request - No Response from Aircraft Terminal								
8/03/2014 01:15:56.000	IOR-P10500-0-386B	IOR	305	10	P-Channel TX	0x14 - Log Control - Log-on Interrogation		
01:16:06 - Handshake Request - No Response from Aircraft Terminal								
8/03/2014 01:16:06.000	IOR-P10500-0-386B	IOR	305	10	P-Channel TX	0x14 - Log Control - Log-on Interrogation		
01:16:15 – Handshake Request - No Response from Aircraft Terminal								
8/03/2014 01:16:15.000	IOR-P10500-0-386B	IOR	305	10	P-Channel TX	0x14 - Log Control - Log-on Interrogation		

REDACTED LOG MISSING THINGS LIKE POSITION REPORTS AND DATA AND MESSAGES SENT TO MH370

Discrepancies – Satellite Log (Pings)

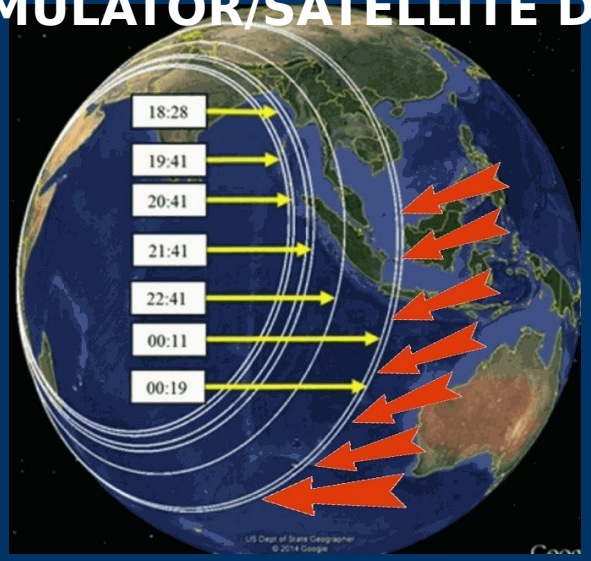
ID F1 – Similarity Between Simulator Route and Satellite-Derived Path

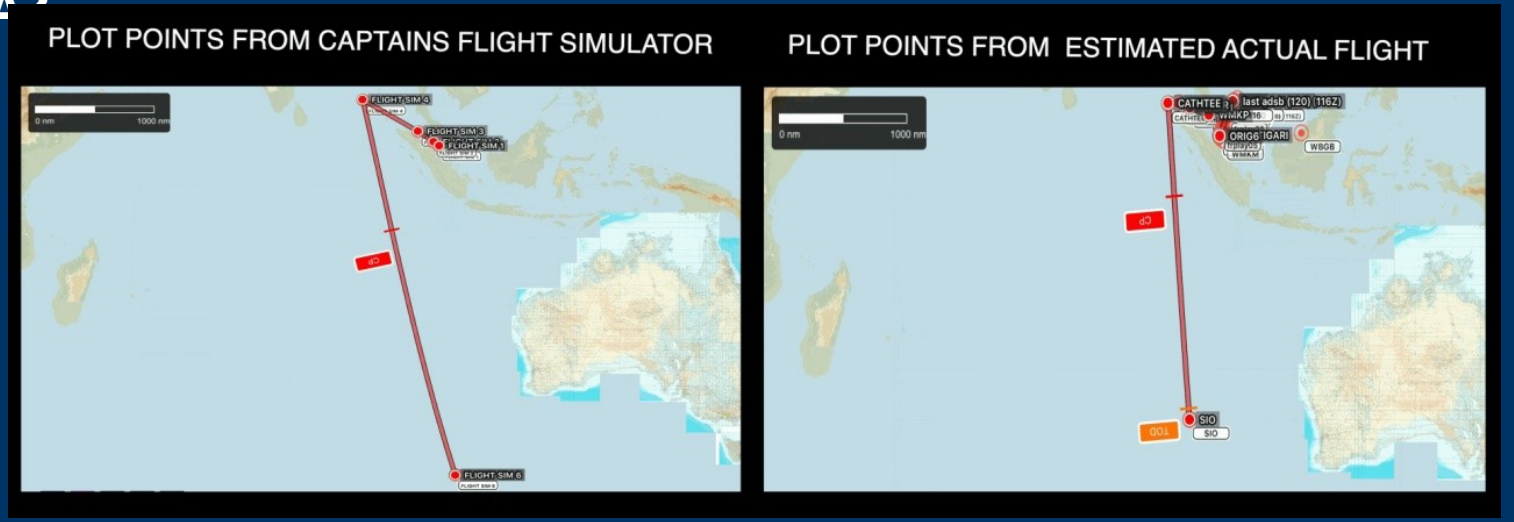
- Simulator route closely resembles satellite-derived path
- AI analysis suggests simulator data may be post-flight
- Implication - possible retrospective creation

Issue: Similarity between simulator route and satellite-derived path may not be independent; possible post-flight creation of simulator data.

Impact: Raises questions about independence of simulator and satellite data.

WITH ALL THE POTENTIAL ANOMALIES IDENTIFIED, HOW RELIABLE IS THE SIMULATOR/SATELLITE DATA?





Discrepancies – Flight Tracking

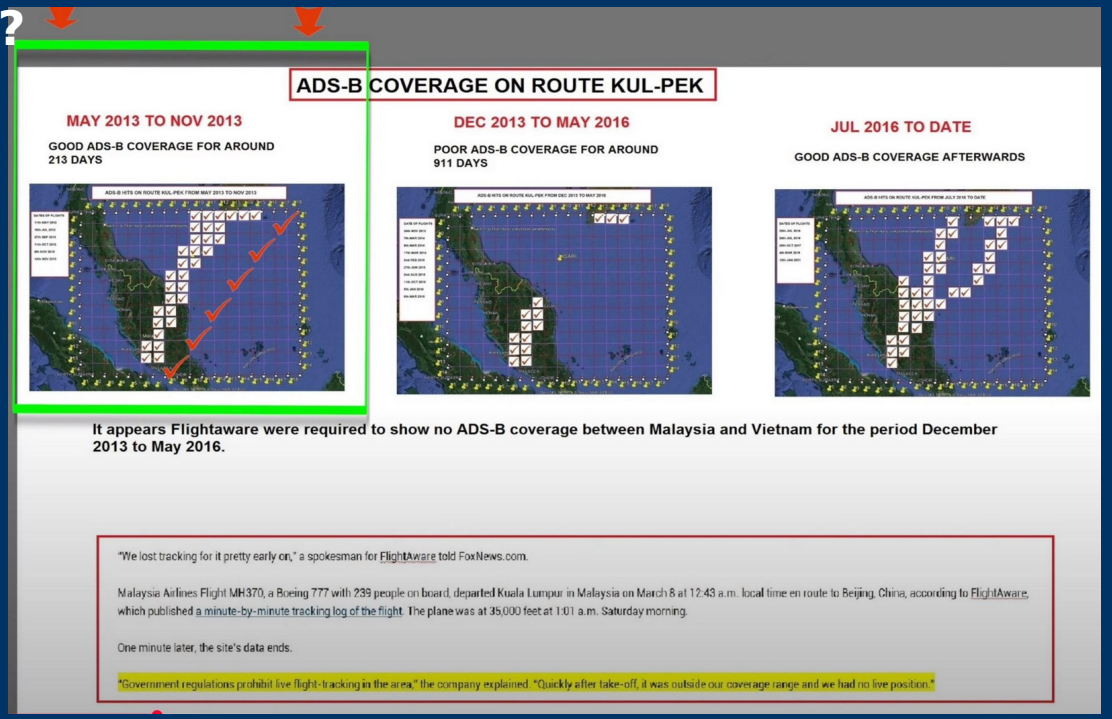
ID G3 – Inconsistent ADS-B Coverage Near IGARI

- Only one platform shows ADS-B coverage to IGARI
- Others (e.g. FlightAware) indicate limited coverage
- Historical FlightAware data suggests coverage existed, then disappeared, then returned

Issue: Inconsistent ADS-B coverage reporting near IGARI across platform and Historical data conflicts with stated coverage limitations.

Impact: Raises questions about reliability of ADS-B coverage assumptions and Introduces uncertainty in last known aircraft tracking data.

FEW MONTHS BACK FLIGHTAWARE HAD GOOD COVERAGE NEAR IGARI. ONLY TO N 4.7 DURING MARCH 2014 ?


ADS-B COVERAGE ON ROUTE KUL-PEK
MAY 2013 TO NOV 2013
GOOD ADS-B COVERAGE FOR AROUND 213 DAYS
DEC 2013 TO MAY 2016
POOR ADS-B COVERAGE FOR AROUND 911 DAYS
JUL 2016 TO DATE
GOOD ADS-B COVERAGE AFTERWARDS
It appears Flightaware were required to show no ADS-B coverage between Malaysia and Vietnam for the period December 2013 to May 2016.
"We lost tracking for it pretty early on," a spokesman for FlightAware told FoxNews.com.
Malaysia Airlines Flight MH370, a Boeing 777 with 239 people on board, departed Kuala Lumpur in Malaysia on March 8 at 12:43 a.m. local time en route to Beijing, China, according to FlightAware, which published a minute-by-minute tracking log of the flight. The plane was at 35,000 feet at 1:01 a.m. Saturday morning.
One minute later, the site's data ends.
"Government regulations prohibit live flight-tracking in the area," the company explained. "Quickly after take-off, it was outside our coverage range and we had no live position."

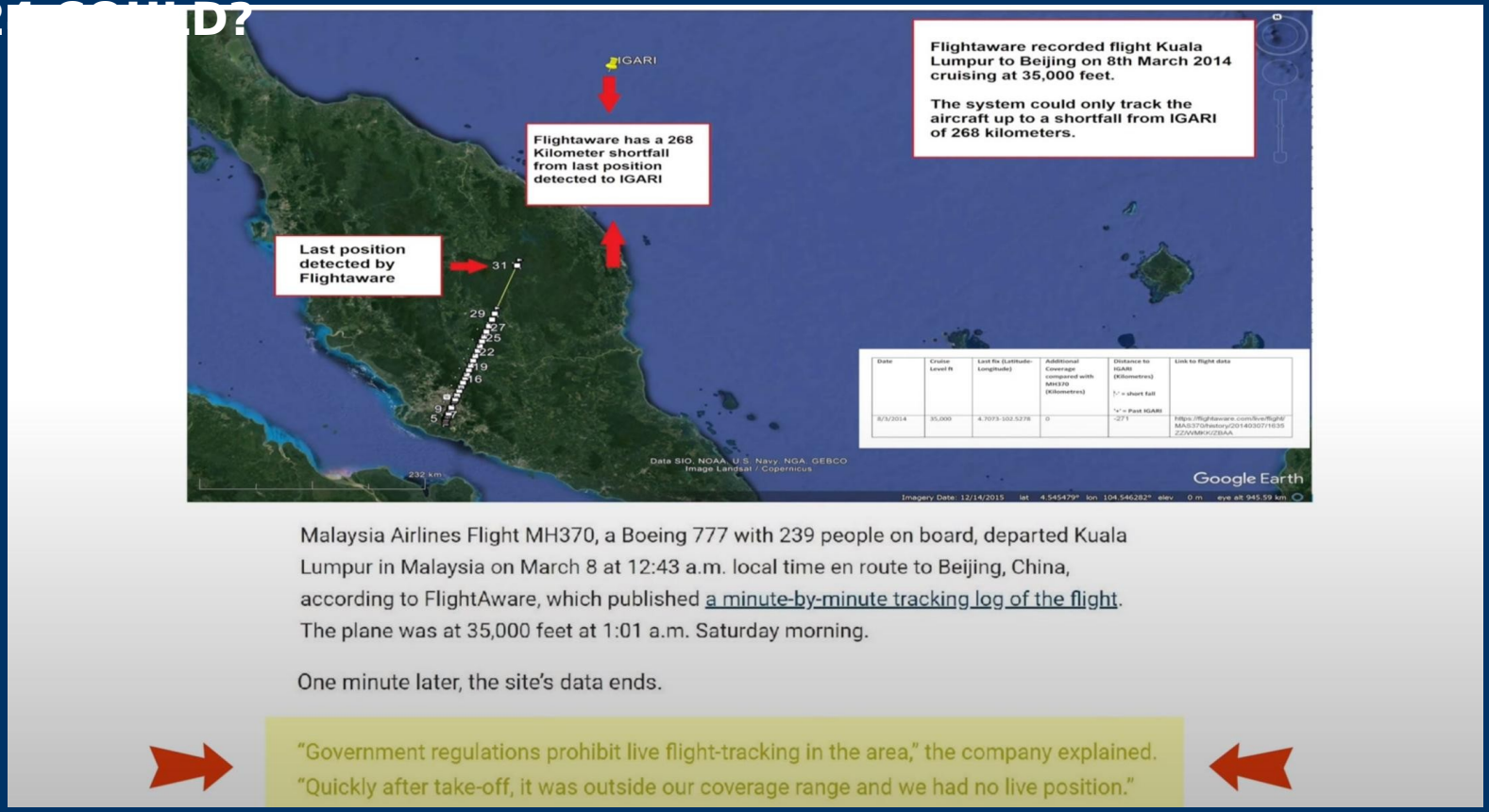
Overview of Discrepancies – Flight Tracking Sites

ID G4 – Reported Restriction on Live Tracking: FlightAware: restricted from tracking over South China Sea but FlightRadar24 recorded tracking in same region.

Issue: Inconsistent platform capabilities in same region.

Impact: Creates uncertainty around completeness of flight tracking data.

FLIGHTAWARE NOT ALLOWED TO RECORD OVER THE SOUTH CHINA SEA. BUT FLIGHRADAR24 COULD?


IGARI
Flightaware has a 268 Kilometer shortfall from last position detected to IGARI
Last position detected by Flightaware
Flightaware recorded flight Kuala Lumpur to Beijing on 8th March 2014 cruising at 35,000 feet.
The system could only track the aircraft up to a shortfall from IGARI of 268 kilometers.
Google Earth
Malaysia Airlines Flight MH370, a Boeing 777 with 239 people on board, departed Kuala Lumpur in Malaysia on March 8 at 12:43 a.m. local time en route to Beijing, China, according to FlightAware, which published a minute-by-minute tracking log of the flight. The plane was at 35,000 feet at 1:01 a.m. Saturday morning.
One minute later, the site's data ends.
"Government regulations prohibit live flight-tracking in the area," the company explained. "Quickly after take-off, it was outside our coverage range and we had no live position."

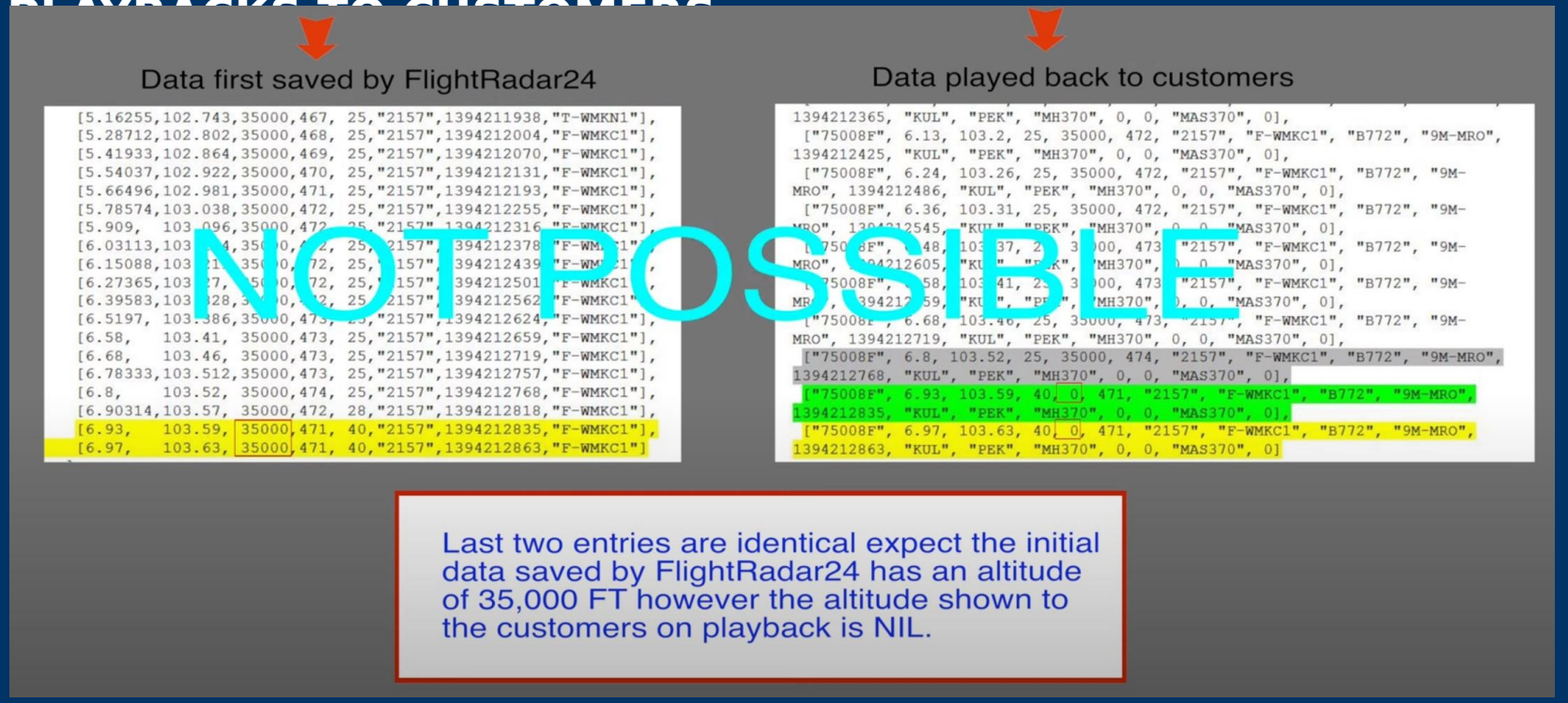
Discrepancies – Flight Tracking Sites

ID G6 – Altitude Inconsistency in Final ADS-B Data: Extracted FlightRadar24 data shows 35,000 ft to final transmission however playback data shows final entries with nil altitude. Also. not clear how ADS-B out could create a NIL altitude.

Issue: Mismatch between extracted ADS-B altitude data and user playback; unexplained nil altitude value

Impact: Introduces uncertainty in final altitude profile of aircraft.

THE DATA EXTRACTED FROM FLIGHTRADA24 DOES NOT APPEAR TO MATCH PLAYBACKS TO CUSTOMERS



*Aside from the mismatch, it is highly unlikely that ADS-B Out would transmit a NIL altitude while in flight.

Discrepancies – Flight Tracking Sites

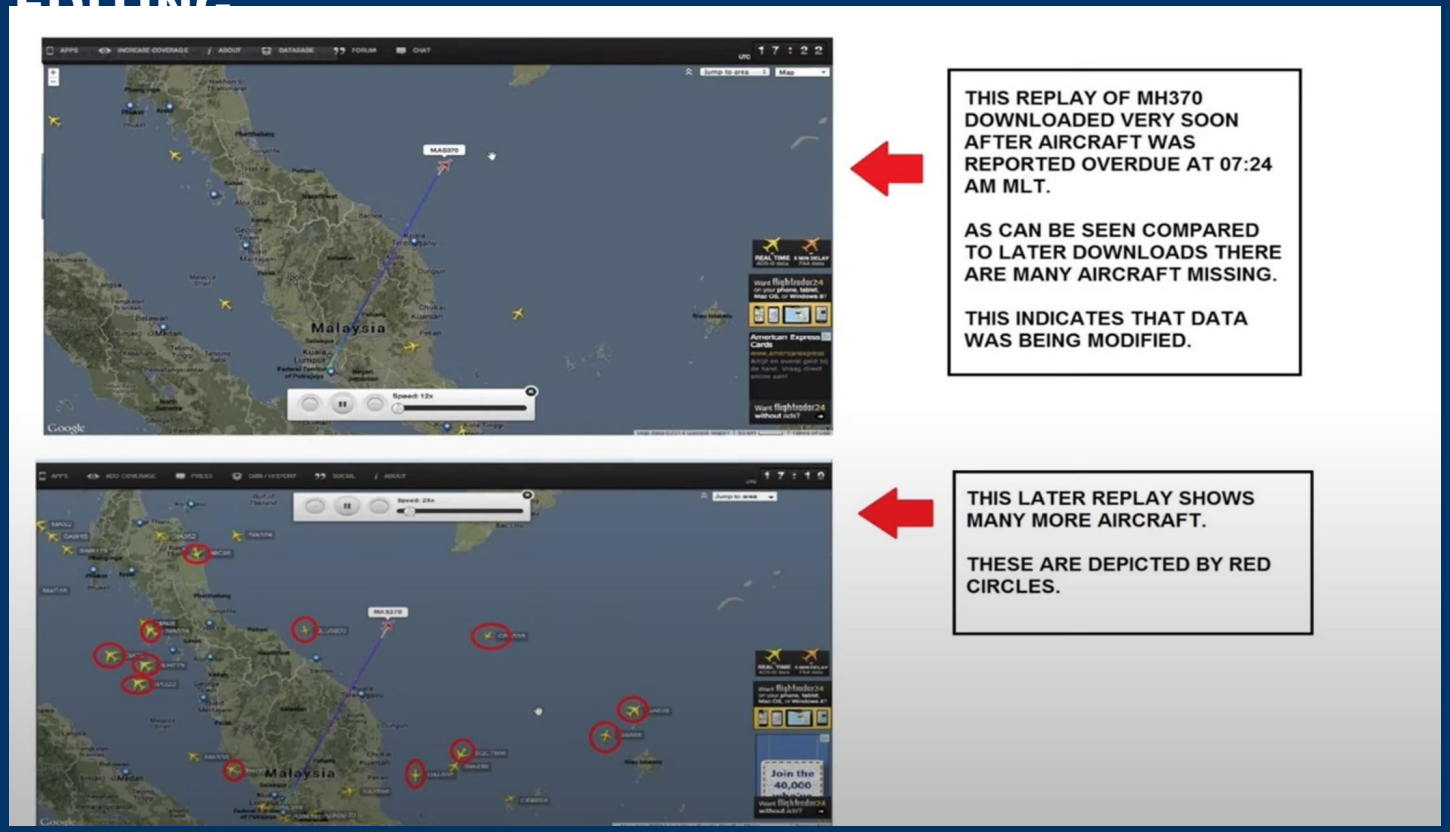
ID G8 – Missing Aircraft in Early Playback Data

Initial FlightRadar24 playback data reportedly omitted nearby aircraft.

Issue: Missing nearby aircraft in early playback data, suggesting incompleteness or post-event updates.

Impact: Raises possibility of post-incident data updates.

AS INITIAL PLAYBACKS HAD MISSING AIRCRAFT THERE IS A POSSIBILITY OF POST FLIGHT EDITING


Malaysia
THIS REPLAY OF MH370 DOWNLOADED VERY SOON AFTER AIRCRAFT WAS REPORTED OVERDUE AT 07:24 AM MLT.
AS CAN BE SEEN COMPARED TO LATER DOWNLOADS THERE ARE MANY AIRCRAFT MISSING.
THIS INDICATES THAT DATA WAS BEING MODIFIED.
Malaysia
THIS LATER REPLAY SHOWS MANY MORE AIRCRAFT.
THESE ARE DEPICTED BY RED CIRCLES.

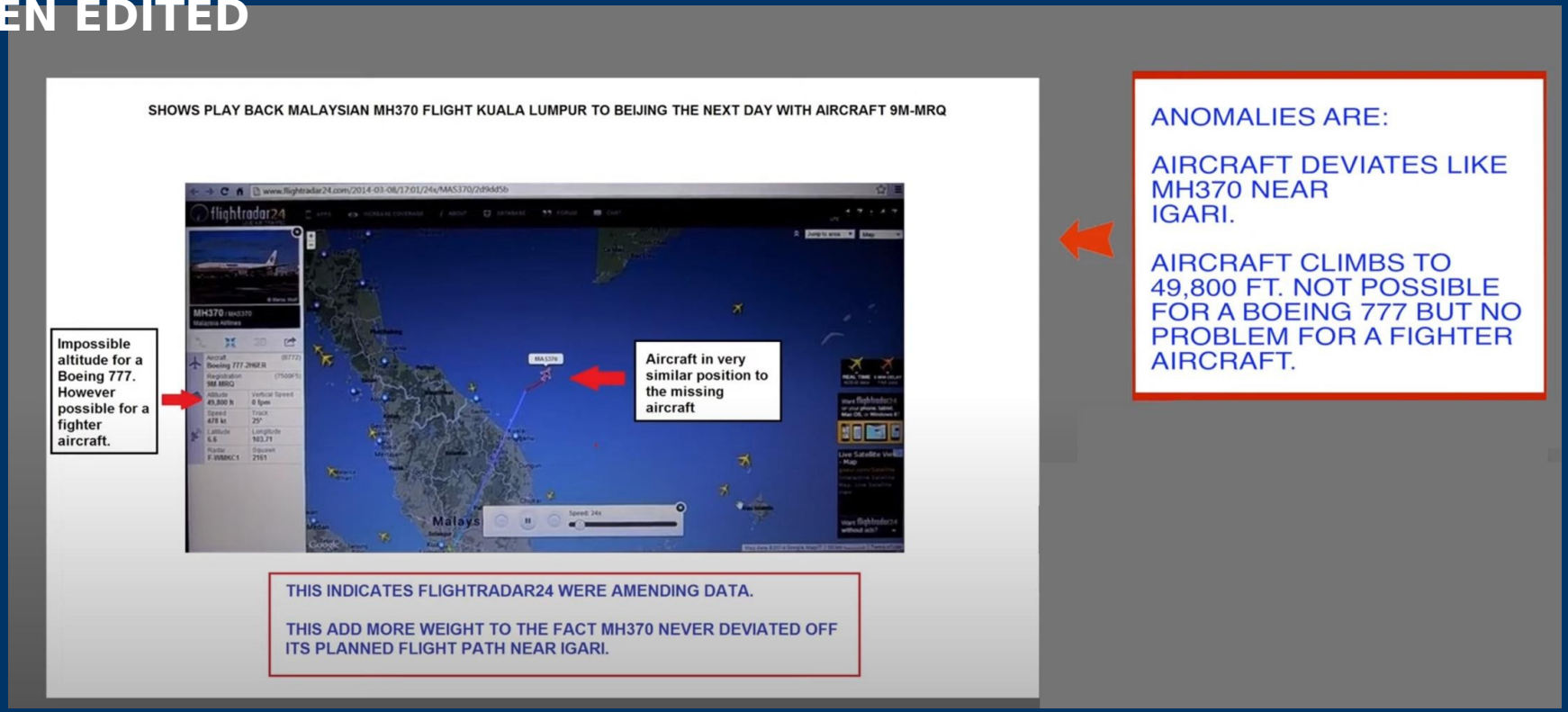
Discrepancies – Flight Tracking Sites

ID G9 – Anomalous Flight Path on Following Day: A playback of a similar Kuala Lumpur–Beijing flight the following day shows a deviation near IGARI and an implausible climb to ~49,800 ft.

Issue: Flight profile exceeds Boeing 777-200ER operational limits.

Impact: Raises caution in interpreting similar datasets, including possible post-processing effects on recorded flight paths.

NEXT DAY FLIGHT SHOWED IMPOSSIBLE 777 FLIGHT PATH. MAYBE DATA COULD HAVE BEEN EDITED


SHOWS PLAY BACK MALAYSIAN MH370 FLIGHT KUALA LUMPUR TO BEIJING THE NEXT DAY WITH AIRCRAFT 9M-MRQ
Impossible altitude for a Boeing 777. However possible for a fighter aircraft.
Aircraft in very similar position to the missing aircraft
THIS INDICATES FLIGHTRADAR24 WERE AMENDING DATA.
THIS ADD MORE WEIGHT TO THE FACT MH370 NEVER DEVIATED OFF ITS PLANNED FLIGHT PATH NEAR IGARI.
ANOMALIES ARE:
AIRCRAFT DEVIATES LIKE MH370 NEAR IGARI.
AIRCRAFT CLIMBS TO 49,800 FT. NOT POSSIBLE FOR A BOEING 777 BUT NO PROBLEM FOR A FIGHTER AIRCRAFT.

Discrepancies – Flight Tracking Sites

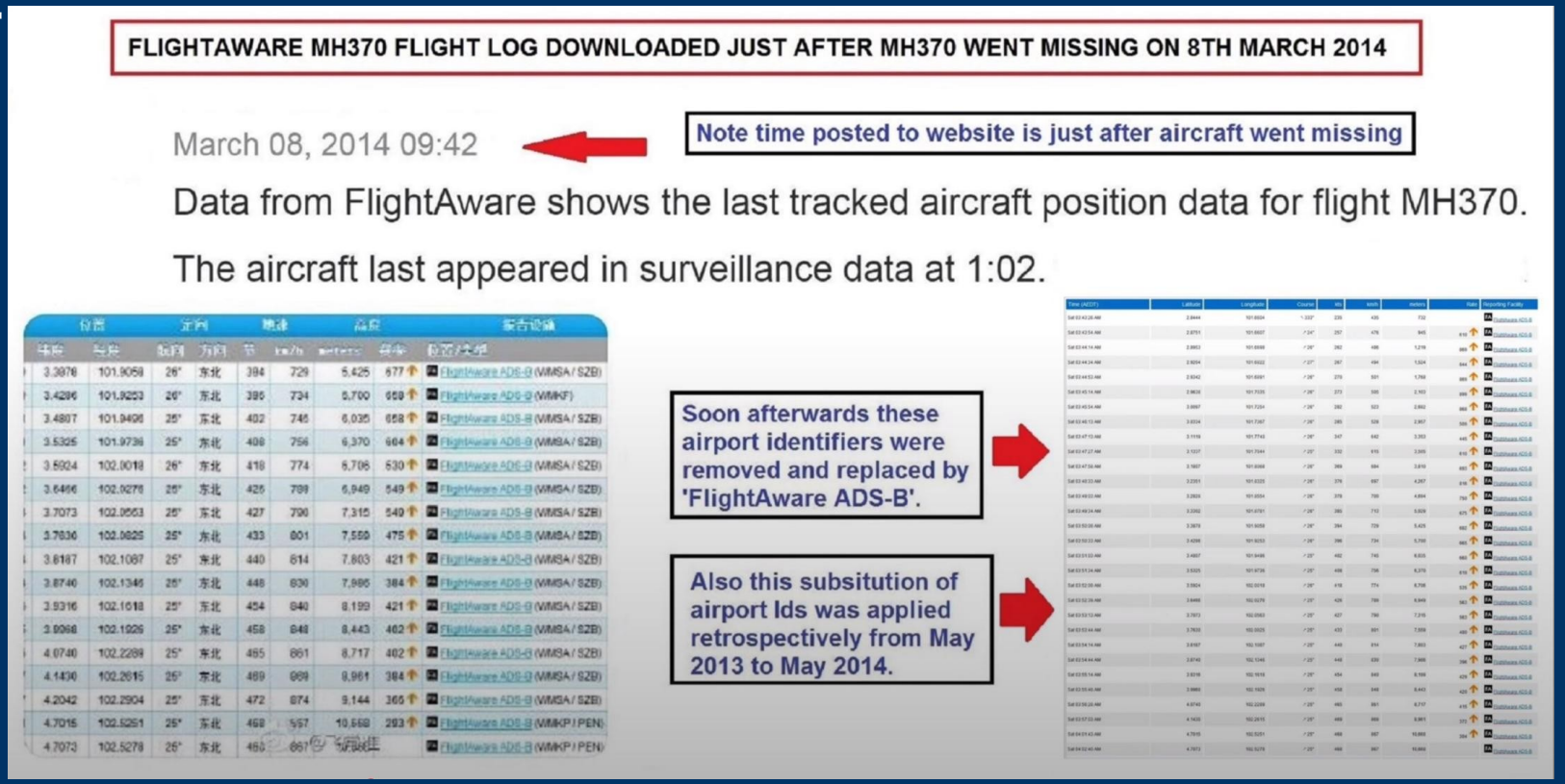
ID G10 – Post-Event Changes to FlightAware Data Presentation

FlightAware removed ‘closest airport’ identifier for ADS-B ground stations post-MH370.

Issue: “Removal of ‘closest airport’ identifier from ADS-B ground station data reduces transparency in coverage analysis.

Impact: Reduces ability to independently assess ADS-B coverage.

WHY SHORTLY AFTER MH370 DISAPPERED WAS THE ADS-B RECEIVER CLOSEST AIRPORT


FLIGHTAWARE MH370 FLIGHT LOG DOWNLOADED JUST AFTER MH370 WENT MISSING ON 8TH MARCH 2014
March 08, 2014 09:42
Note time posted to website is just after aircraft went missing
Data from FlightAware shows the last tracked aircraft position data for flight MH370.
The aircraft last appeared in surveillance data at 1:02.
Soon afterwards these airport identifiers were removed and replaced by 'FlightAware ADS-B'.
Also this subsitution of airport Ids was applied retrospectively from May 2013 to May 2014.

Discrepancies – Military Data

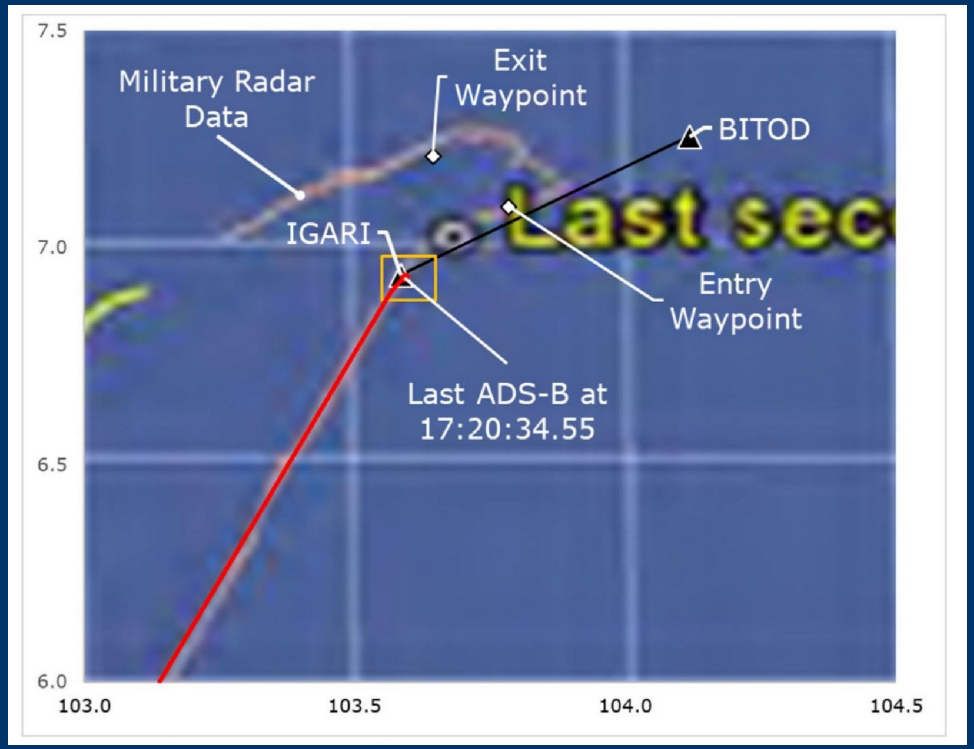
ID H1 – Lack of Raw Military Radar Data

- No raw military radar data has been released; only a diagram was provided.
- Turnback near IGARI within range of known primary radar systems .
- No clear national security reason to withhold radar data for turnback phase.

Issue: Reliance on diagram rather than raw radar data.

Impact: Prevents independent validation of aircraft's turnback path.

NO CLEAR NATIONAL SECURITY REASON TO WITHHOLD MILITARY RADAR DATA FOR THE TURNBACK



Discrepancies – ADS-B Data

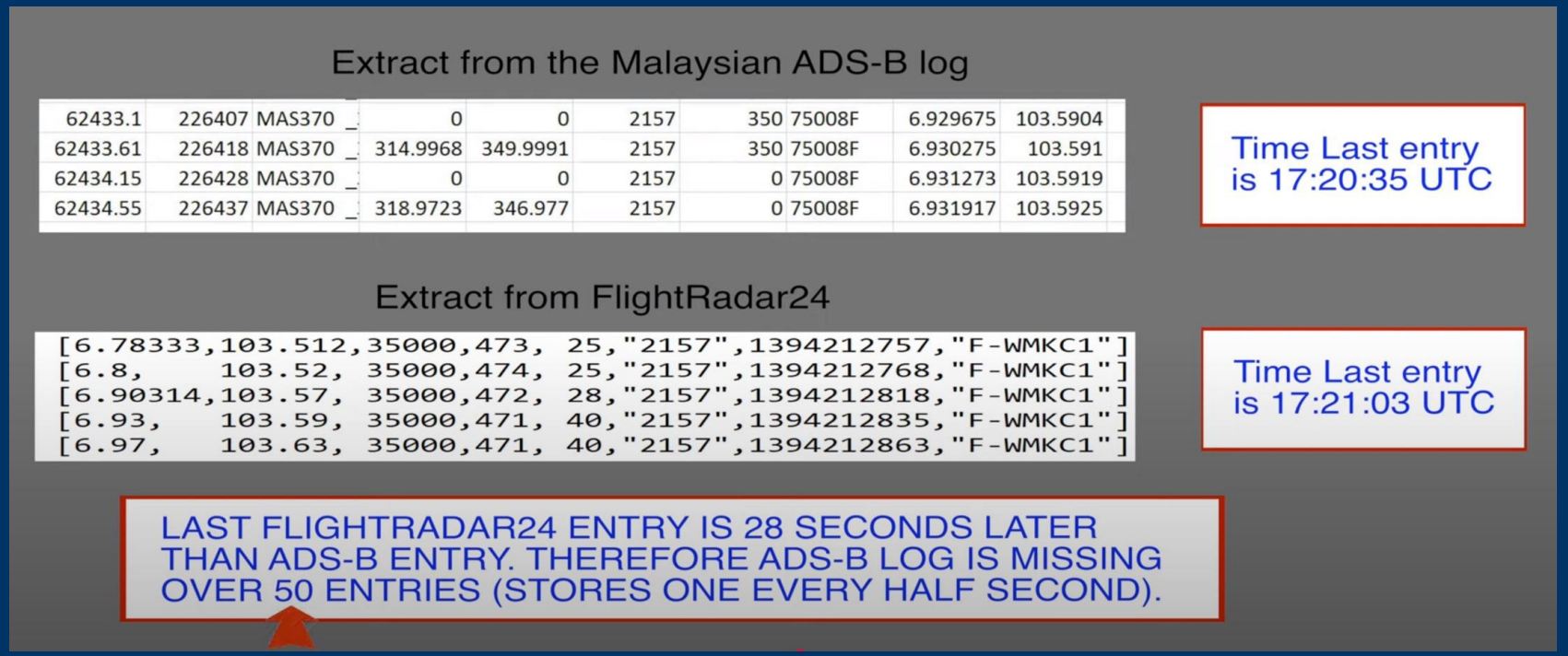
ID I1 – Missing Transactions and Altitude Mismatch

- ADS-B log and FlightRadar24 should align (same ADS-B Out source)
- 28 seconds (~50 transmissions) missing from official log
- Final altitude readings do not match FlightRadar24

Issue: Mismatch between official ADS-B log and FlightRadar24 data, including missing transmissions and altitude difference.

Impact: Limits confidence in reconstructed ADS-B timeline.

ADS-B LOG DOES MATCH UP WITH THE FLIGHTRADAR24 DATA



Discrepancies – ADS-B Data

ID I2 – Raw Asterix File Timing Discrepancy

- Raw Asterix file released ~11 years after MH370 disappearance
- Described as ADS-B derived data from Terengganu ground station
- Timestamps differ by ~3h 49m from MH370 flight

Issue: Raw Asterix file timeframe does not match MH370 flight to IGARI."

Impact: Raises questions about data selection and relevance.

RAW ASTERIX FILE COVERS A DIFFERENT TIME FRAME THAN MH370'S FLIGHT TO IGARI

1	Original data	ICAO CODE	Latitude from Raw	Longitude from raw	Time HEX CODE FROM RAW	Time UTC RAW
2	FFA1D9065A040028912B06001160F7011DACAE70203F168C080708054F000008AAFCC20820F0E3782002247527	70203F-20	6.109723449	100.432452	912B06	20:38:46.046
3	FFA191065A040028912B030010A6AE011CD08476CEED1740080708057800004C9076C6082005C826	76CEED-20	5.853899717	100.1301026	912B03	20:38:46.023
4	FFA191065A040028912AFD0007CA66012797B276CEF4109808070803E6FEE14C9076DE0820228C23	76CEF4-20	2.738889456	103.9192593	912AFD	20:38:45.976
5	FFA191065A040028912B0000090A1A012E034788515719280806080 5F00000508074DB282022D026	885157-20	3.177934885	106.1763757	912B00	20:38:46.000
6	FFA191065A040028912B0F000D0EAE0128837C76CE9619D8080708061800004C9078D7382026482D	76CE96-20	4.590471983	104.2430663	912B0F	20:38:46.117
7	FFA191065A040028912B150006285501281EFC7803BE0A200807080262FF290C54F5D338202A2B20	7803BE-20	2.164762616	104.1050506	912B15	20:38:46.164

** Contains no data for MH370*

DIFFERENT TIME FRAME

Discrepancies – Other

ID J1 – Contradictory Reports on Fighter Aircraft Deployment

- Malaysia: no fighter aircraft deployed for MH370 search
- Eyewitness: USAF F-18 instructor observed F-18s at Butterworth (8 March 2014)
- Pilots reportedly confirmed they were searching for MH370
- Search direction (northwest) conflicts with last known position (South China Sea)

Issue: Contradiction between official statements and eyewitness account of fighter aircraft deployment.

Impact: Suggests possible undisclosed or unacknowledged military involvement.

USA F18 INSTRUCTOR INFORMED 8TH MARCH 2014 MORNING F18

USA F[illegible] Information on MH370

Jul 13, 2023 Via The Mover and Gonky Show - https://www.youtube.com/watch?v=xIJBS9yRVpU

Just looking at the facts so uh March 8th 2014 is kind of a weird day because that's the day MH370 disappeared was

also the same day I dropped my father-in-law and mother-in-law off at Penang airport for them to fly back

oh yeah dude so oh wow you were there to

the headlines yeah you know jet missing out of Penang and I

Was like I thought oh my God and uh yeah thankfully for me I guess us it wasn't it wasn't them but

you know at the time everybody is like it disappeared off the coast of Vietnam way to the Northeast and so you know I hop on my scooter and I go to work and

Uh the guys all the guys were there and all the Jets had three tanks on them and I'm like did you guys you guys been

flying like yeah man we went looked for MH370

I'm like in Vietnam I'm like do you have tanker support like

No you know they they're like we went Northwest the other way and I was like that's weird it's not over there um it wasn't until aNout two weeks later it came out that hey actually it is it did go that way so you know I won't speculate but the facts

** Possibly military knew about turn back much earlier than reported*

Discrepancies – ARINC/SITA Logs

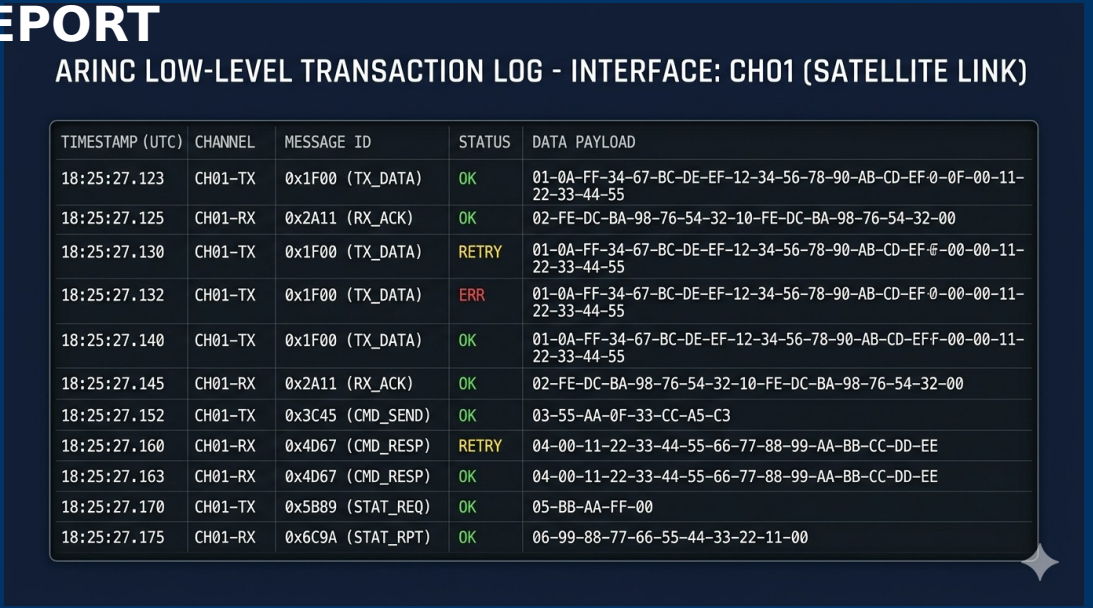
ID K1 – Raw ARINC/SITA Logs Not Included in Official Report

- Raw ARINC/SITA logs not included in official report
- Logs would capture ACARS SATCOM and VHF communications
- Relevant to 18:25 UTC logon and failed VHF transmission
- Primary data typically expected in major investigations

Issue: Absence of raw ARINC/SITA logs limits access to primary ACARS communication data.

Impact: Reduces transparency in reconstruction of key timeline points.

NO ARINC LOGS INCLUDED WITH OFFICIAL REPORT



ARINC LOW-LEVEL TRANSACTION LOG - INTERFACE: CH01 (SATELLITE LINK)

TIMESTAMP (UTC)	CHANNEL	MESSAGE ID	STATUS	DATA PAYLOAD
18:25:27.123	CH01-TX	0x1F00 (TX_DATA)	OK	01-0A-FF-34-67-BC-DE-EF-12-34-56-78-90-AB-CD-EF-0-0F-00-11-22-33-44-55
18:25:27.125	CH01-RX	0x2A11 (RX_ACK)	OK	02-FE-DC-BA-98-76-54-32-10-FE-DC-BA-98-76-54-32-00
18:25:27.130	CH01-TX	0x1F00 (TX_DATA)	RETRY	01-0A-FF-34-67-BC-DE-EF-12-34-56-78-90-AB-CD-EF-6-00-00-11-22-33-44-55
18:25:27.132	CH01-TX	0x1F00 (TX_DATA)	ERR	01-0A-FF-34-67-BC-DE-EF-12-34-56-78-90-AB-CD-EF-0-00-00-11-22-33-44-55
18:25:27.140	CH01-TX	0x1F00 (TX_DATA)	OK	01-0A-FF-34-67-BC-DE-EF-12-34-56-78-90-AB-CD-EF-F-00-00-11-22-33-44-55
18:25:27.145	CH01-RX	0x2A11 (RX_ACK)	OK	02-FE-DC-BA-98-76-54-32-10-FE-DC-BA-98-76-54-32-00
18:25:27.152	CH01-TX	0x3C45 (CMD_SEND)	OK	03-55-AA-0F-33-CC-A5-C3
18:25:27.160	CH01-RX	0x4D67 (CMD_RESP)	RETRY	04-00-11-22-33-44-55-66-77-88-99-AA-BB-CC-DD-EE
18:25:27.163	CH01-RX	0x4D67 (CMD_RESP)	OK	04-00-11-22-33-44-55-66-77-88-99-AA-BB-CC-DD-EE
18:25:27.170	CH01-TX	0x5B89 (STAT_REQ)	OK	05-BB-AA-FF-00
18:25:27.175	CH01-RX	0x6C9A (STAT_RPT)	OK	06-99-88-77-66-55-44-33-22-11-00

* Representative ARINC low-level transaction log (simulated for illustration)

Discrepancies – Prior Flight MH371

ID L1 – Last ACARS 5-Minute Segment Indicates Unrealistic Speed

- Final ACARS 5-minute segment covers unusually large distance
- Comparison with prior flights (Including 777-200ER aircraft)
- Implies unrealistically high speed during approach phase

Issue: Final ACARS segment implies speed exceeding typical 777-200ER approach performance.

Impact: Suggests possible data or reporting inconsistency.

THE PRIOR FLIGHT MH371, APPEARED TO APPROACH AT AN UNREALISTIC SPEED

Flight	Date	Aircraft Type	Time	Average Speed Kts
MH371	7 Mar 2014	B777-200ER	5:00	356
KLM80917	Dec 2024	B777-200ER	7:39	233
KLM8093	Dec 2024	B777-200ER	7:07	250
PIA898	1 Dec 2024	B777-200ER	8:16	216
TH415	6 Mar 2024	B777-200ER	7:20	241
MAS361	21 Dec 2014	A330-300	7:00	255
MH6197	28 Sep 2021	A330-300	7:11	248

Illustration-136C: Comparison of the time taken by other flights to cover the same 29.7 NM segment as MH371.

TO FAST FOR APPROACH PHASE

Discrepancies – Prior Flight MH371

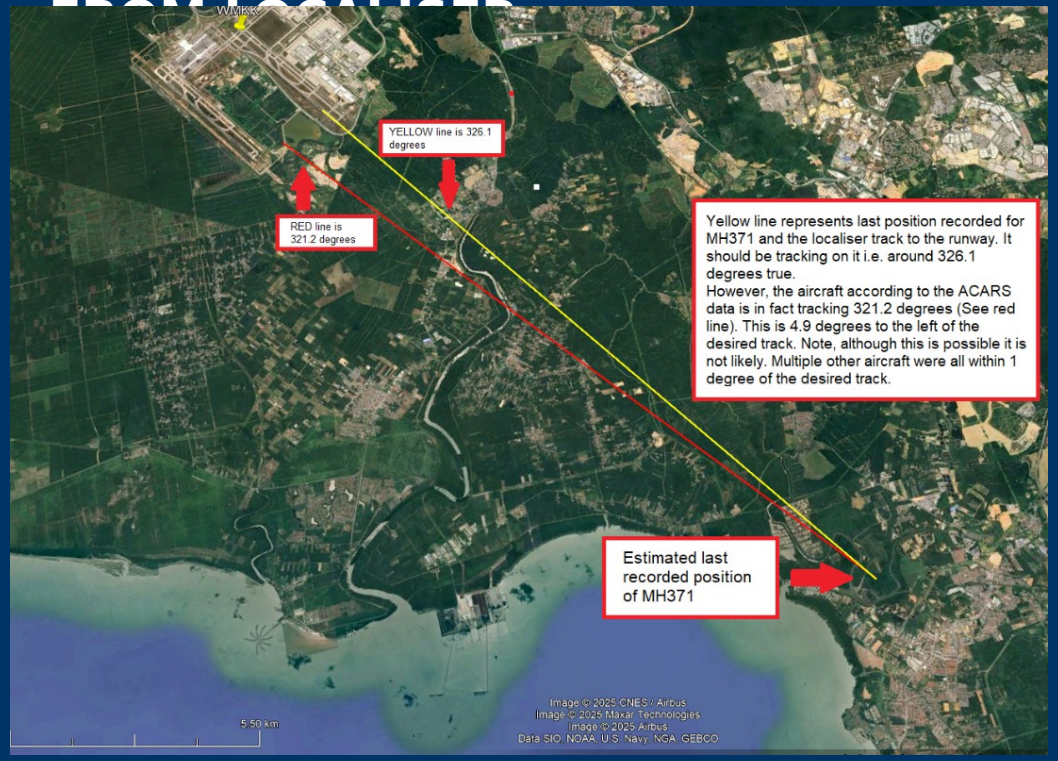
ID L2 – Aircraft Off Extended Centreline on Approach

- At 9.5 NM, the aircraft's heading ~4.9° off extended centreline
- Typical ILS heading alignment at this distance: ~1°-2 °- or less
- Deviation larger than expected for stabilised approach (other aircraft were typically +-1°)

Issue: Aircraft heading much more off the localiser than other aircraft.

Impact: Introduces uncertainty in reconstructed flight path.

UNLIKELY WHEN 9.5NM FROM TOUCH DOWN MH371 POINTING 4.9 DEGREES AWAY FROM LOCALISER


WMKK
YELLOW line is 326.1 degrees
RED line is 321.2 degrees
Yellow line represents last position recorded for MH371 and the localiser track to the runway. It should be tracking on it i.e. around 326.1 degrees true.
However, the aircraft according to the ACARS data is in fact tracking 321.2 degrees (See red line). This is 4.9 degrees to the left of the desired track. Note, although this is possible it is not likely. Multiple other aircraft were all within 1 degree of the desired track.
Estimated last recorded position of MH371
5.50 km
Image © 2025 CNES / Airbus
Image © 2025 Maxar Technologies
Image © 2025 Airbus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

WMKK (Kuala Lumpur) — 7 March 2014

Closest available METARs:

07:00 UTC

- Wind: **VRB03KT** (variable at 3 knots)
- Temp: **32°C**
- Dew point: **24°C** MetarCentral

TuTiempo.net

Winds were light so that would not require a large crabbing angle on approach

Discrepancies – Prior Flight MH371

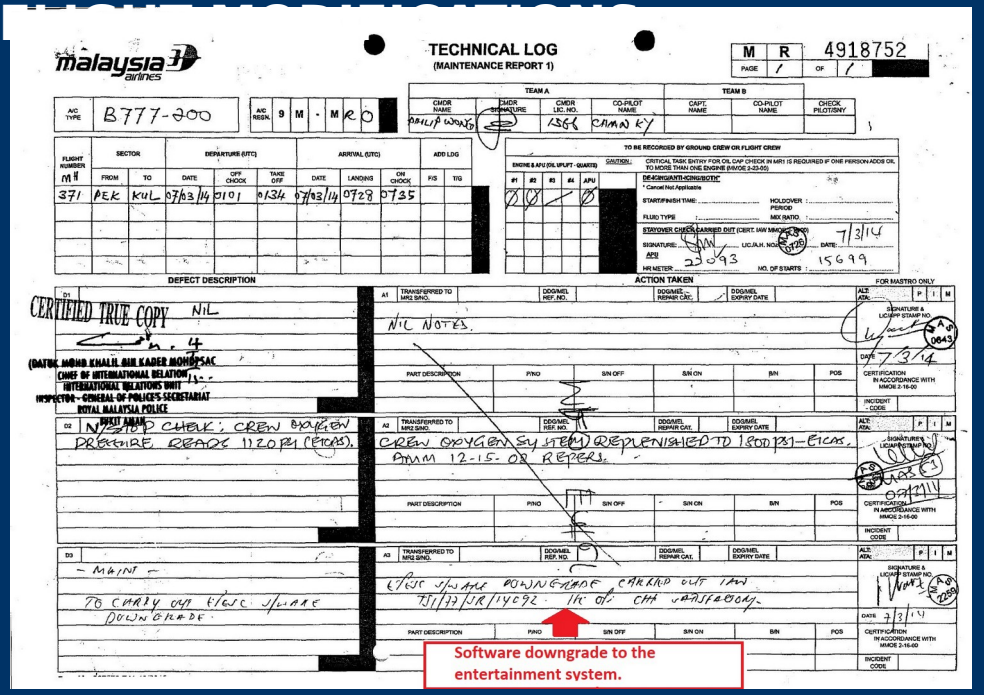
ID L3 – Possible Modification of Maintenance Form Recording Landing Time

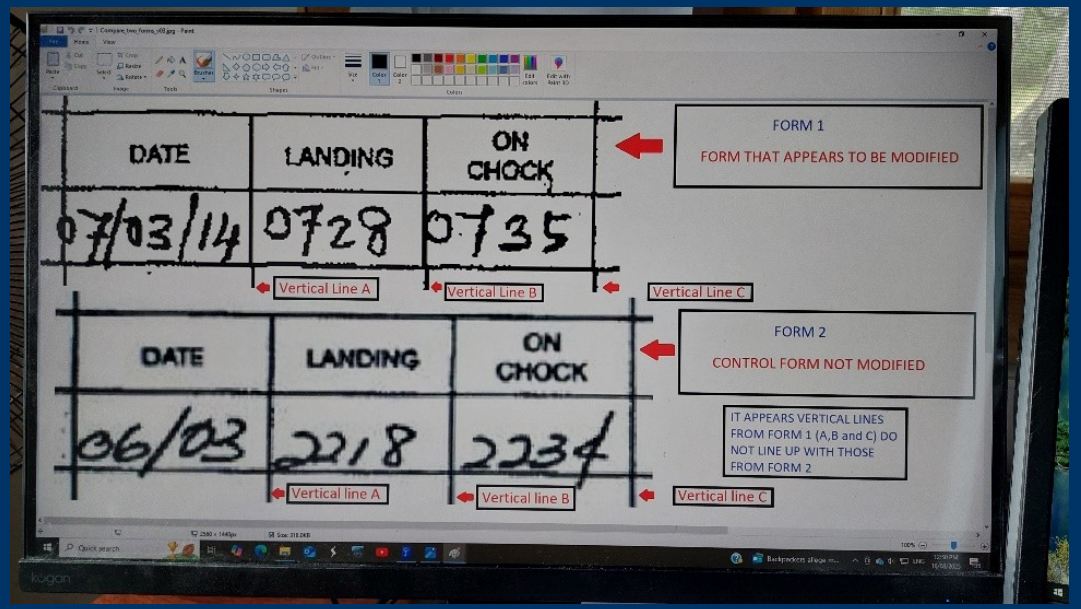
- Maintenance form shows irregular scan inconsistencies (misaligned vertical lines, dust mark differences)
- Second scan differs from initial image around landing time area
- 2 of 3 related forms redacted in official report

Issue: Inconsistencies in maintenance form scans and redacted documents relating to landing time records.

Impact: Introduces uncertainty around recorded landing time written on the maintenance form.

CHANGES TO THE MAINTENANCE FORM SEEM TO POINT TO POSSIBLE POST





Discrepancies – Prior Flight MH371

ID L4 – Landing Time of 07:28 May Be Slightly Later

With bringing together discrepancies L1–L3:

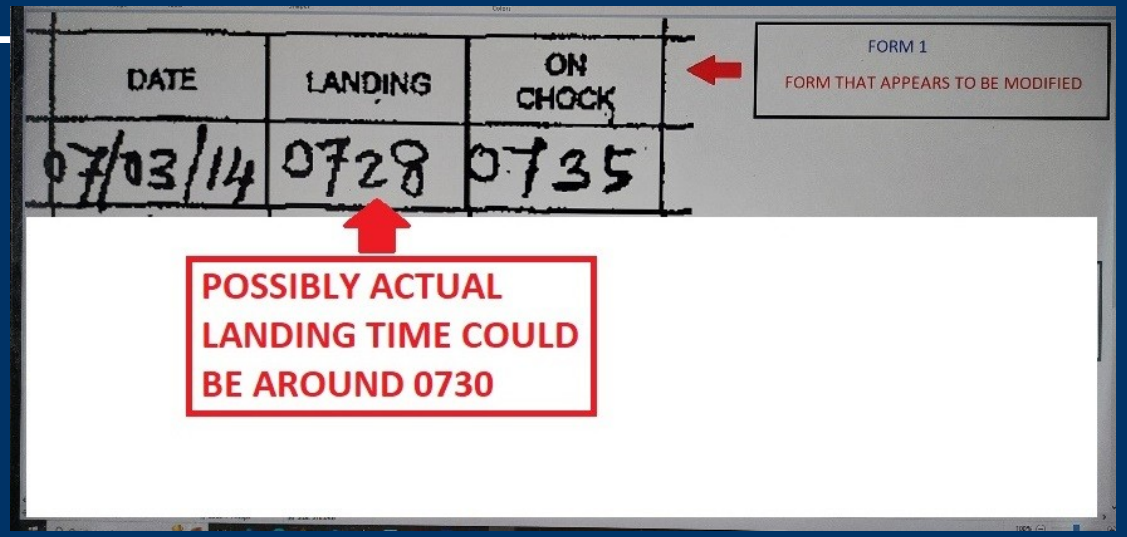
- Suggests an approach speed inconsistent with standard landing profiles.
- The maintenance form shows indications of possible alteration.
- Two other maintenance forms that likely also contained landing-time were were redacted.

Issue: Recorded landing time (07:28) may be understated by ~2 minute.

Impact:

- Potential missing ACARS position report near runway threshold.
- Raises possibility of post-flight data redaction or timeline adjustment.

POSSIBLY ACTUAL LANDING TIME OF MH371 WAS AROUND 2 MINUTES L



** A provisional explanation for this potential modification is under review and will be addressed later.*

We have now covered all the main potential discrepancies

AI's Assessment of the Turnback at IGARI

We have now reviewed the key discrepancies (45 in total).

Let's return to Slide 8, where the AI assessed that the turnback at IGARI may not be fully consistent with the MH370 data.

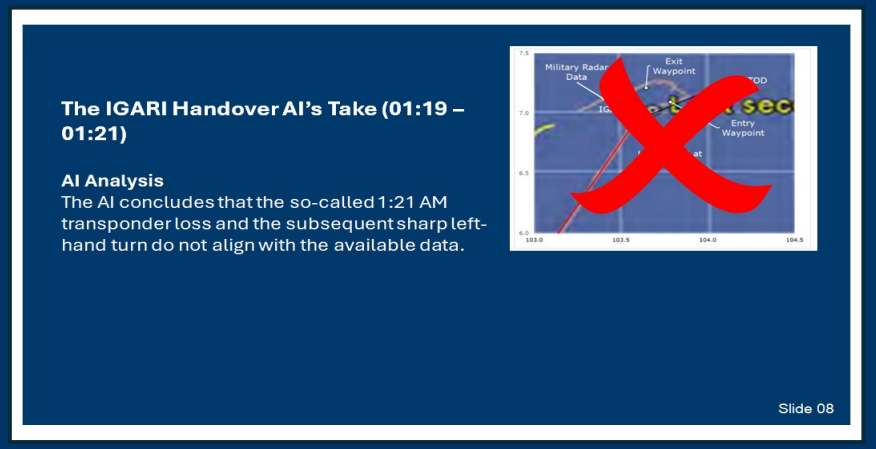
The AI's primary concern is that, while some individual discrepancies might be explained in isolation, their overall number is significant. Taken together, they weaken the likelihood that the IGARI turnback aligns with the available evidence.

Issue: High volume of discrepancies reduces confidence in IGARI turnback interpretation.

Impact:

- AI assessment shifts from isolated anomalies to systemic inconsistency.
- Core narrative of MH370 flight path requires re-evaluation.

CIRCLING BACK TO SLIDE 8


The IGARI Handover AI's Take (01:19 – 01:21)
AI Analysis
The AI concludes that the so-called 1:21 AM transponder loss and the subsequent sharp left-hand turn do not align with the available data.
Military Radar Data
Exit Waypoint
Entry Waypoint
Slide 08

Main issues AI has with IGARI turnback

AI's Assessment of the Turnback at IGARI

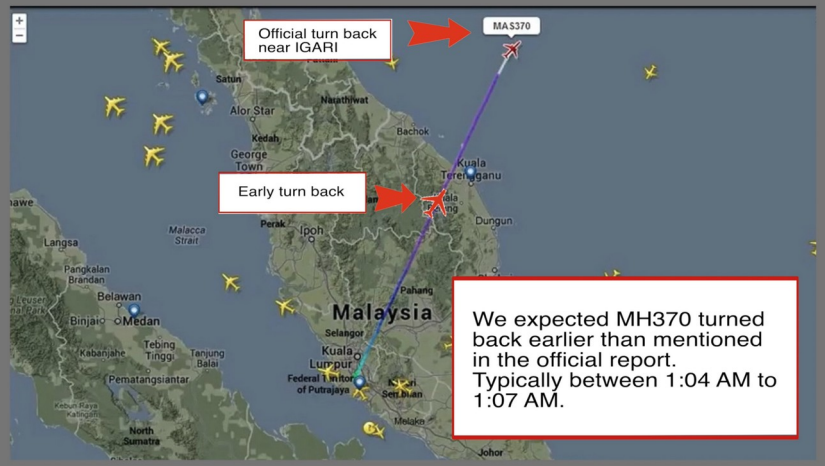
We will now take a closer look at the key issues identified by AI with the turnback near waypoint IGARI.

Issue: Key discrepancies challenge the assumed location of the IGARI turnback.

Impact: Raises uncertainty about where and how the turnback occurred.

COULD THE TURN BACK HAVE HAPPENED EARLIER?

We will now look at some of the Air Traffic Control events that on the 8/3/2014 to see if they could support the theory that MH370 could have started its turn back much earlier than the 1:21 AM as contained in the official report.



Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
1	There is an inconsistency in how the final voice transmission at 1:19 AM was reported—initially as “All right, good night,” and later as “Good night, Malaysian three seven zero.
2	The identity of the final speaker was revised from the First Officer to the captain, introducing uncertainty in the interpretation of the last transmission.
3	Approximately 15 minutes before IGARI, the captain with out being prompted by air traffic control states that the aircraft is maintaining Flight Level 350, and then repeats this six minutes later—an unusual communication patter.

1-3 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
4	The final two radio transmissions show signs of over-peaking, particularly in the last exchange. This type of distortion is unusual in normal radio conditions and may indicate possible audio processing or degradation.
5	The transmission “Good night, Malaysian 370” was issued without the frequency reference (120.9), despite all earlier transmissions including it in line with standard procedure.
6	Vietnamese air traffic control did not identify a missed handover for approximately 19 minutes, whereas such a failure would typically be detected within about five minutes.

4-6 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
7	The Malaysian air traffic controller did not record the handover time on the flight progress strip, despite this being standard procedure if the aircraft had reached IGARI as expected.
8	ADS-B data—and its representation on FlightRadar24—shows an altitude of “NIL” at approximately 6.9°N latitude, which is unusual given that ADS-B transmissions typically include full position data or cease entirely.
9	The downloaded FlightRadar24 dataset records 35,000 ft in the final ADS-B entries, while the playback interface displays altitude as “NIL,” creating a discrepancy between raw data and visualisation.

7-9 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
10	The ADS-B transmission log from FlightRadar24 contains a gap of approximately 28 seconds, representing around fifty missing transmissions, which breaks continuity between recorded data and the ADS-B output.
11	FlightAware tracking appears to terminate around latitude 4.7°N, approximately 235 kilometres short of the expected coverage range near 6.9°N.
12	Early FlightRadar24 playback versions reportedly displayed an incorrect timestamp of approximately 1:50 AM and were missing multiple aircraft that should have been visible in the airspace.

10-12 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
13	Radar reconstruction of MH370’s turn appears incomplete, with the mid-turn position approximately 80 kilometres short of an expected continuous track, and the manoeuvre represented as two straight-line segments rather than a smooth arc.
14	Secondary radar data appears to terminate around latitude 5.2°N, approximately 180 kilometres short of its tracking range, raising questions about the completeness of the released dataset.
15	Early flight data indicates the aircraft may have departed approximately 550 metres right of the runway centreline, introducing an early positional inconsistency in the dataset.

13-15 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
16	InInitially, only a single Malaysian ADS-B receiver log—from the Terengganu receiver—was made publicly available. However,11 year later another log emerged from the Genting receiver. That is very unusual for major aircraft accident investigations.
17	The Genting ADS-B log released after 11 years since the aircraft went missing has positional data with too short transmission time intervals. It suggests the data may not have been captured directly from real-time aircraft transmissions.

16-17 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
18	The raw ASTERIX radar file released 11 years after MH370 disappeared contains no data for MH370, nor for any other aircraft in that airspace during the period up to IGARI. This absence is unexpected and is difficult to reconcile with standard aircraft accident investigation protocols.

18-18 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
19	An ASCII representation of the ASTERIX radar data was released 11 years after MH370 went missing and contains only data for MH370. In addition, the format does not align with standard ASTERIX processing conventions. This raises questions as to whether the data was derived directly from ADS-B outputs.

19-19 of 19 discrepances

Detailed issues that AI has with the turn-back being at IGARI

No	Issue description
19 (cont)	To explain the previous slide in simple terms, the ASTERIX data does not appear to have been captured directly from the aircraft. It does not behave in the way standard ASTERIX processing would normally work. In essence, ASTERIX data is not a direct copy of ADS-B transmissions. It is independently recalculated using a different system and geometry model. As a result, its track values will almost always differ slightly from the original ADS-B values.

19-19 of 19 discrepances

AI-Assisted Analysis and Limitations

This analysis incorporates AI-assisted methods. While AI can identify patterns and generate insights, it is not infallible and may occasionally produce inaccurate or unsupported outputs (“hallucinations”). All findings should therefore be independently reviewed and validated against primary data sources.
To mitigate this risk, responses have been cross-checked using multiple AI models and, where possible, validated against primary data sources.

However, these measures do not guarantee complete accuracy. All findings should therefore be independently reviewed and verified.
If you notice any anomalies or potential errors, please let us know via the contact page on our website: www.mh370whathappened.com.

Summary of the 19 discrepancies just covered

We have now briefly outlined 19 of the 45 discrepancies identified by AI within the MH370 dataset.
It is reasonable to consider that if MH370 had in fact turned back near IGARI at approximately 1:21 AM, the majority of these discrepancies would be unlikely to have occurred.
This concludes the presentation. Thank you for watching.

Discussion

Let's discuss: your thoughts on the MH370 discrepancies.